THE

Board of Trade Journal

OF

TARIFF AND TRADE NOTICES

AND

MISCELLANEOUS COMMERCIAL INFORMATION.

Vol. X.] February 1891. [No. 55.

I.—BOARD OF TRADE NOTICES.

State of the Skilled Labour Market.

The following memorandum has been prepared for the *Board of Trade Journal* by the Labour Correspondent to the Board of Trade:—

The trade reports this month from 21 societies representing the principal skilled industries, show, with a few exceptions, some falling off in the labour market as compared with last month's figures. This is, however, largely due to the numerous strikes that have taken place, there being 73 noted during the month as against 60 in the month preceding. Of these, the cotton trade has furnished rather more than one-third, the number being 25, and these have been chiefly due to disputes arising out of the recent advance of wages movement, but they do not include a very large number of workers. There have been 10 strikes in the coal trade, seven among dock labourers, three in the woollen trade, two in the building trade, and the remainder are distributed among the lesser industries.

The Scottish railway strike has come to an end, but some of its indirect effects are yet visible in the reports of some of the Scottish trade unions. This is particularly noticeable in the case of the ironfounders, whose per-centage of men out of work went up during the month from 5 to 16·25. There was also an increase in the unemployed list of most of the Scottish trades requiring frequent supplies of raw material by rail. As the cause of this temporary stoppage has disappeared there will probably be a return to something near the conditions existing before the strike.

Apart from these cases the chief falling off has been in the building trades, which at the end of January had not recovered from the effects of the severe weather.

The engineering, shipbuilding, and other branches of the iron trade remain remarkably firm, and the chief society of the first-named branch shows in its report a considerable improvement

upon the figures of the previous month, the proportion of unemployed having decreased from 2·7 to 1·9 per cent. This, upon a membership of close on 70,000 men, indicates a fairly healthy condition of trade.

Summarising the returns, it appears that the 21 societies sending in their reports to the Board of Trade have an aggregate membership of 239,080, of which 8,063 were unemployed as against 7,253 in the month before, an increase of 810. The proportion this month is 3·37, whereas last month it was 3·05 per cent. Bearing in mind, however, the circumstances to which this slight increase is due, it cannot be considered as of a serious character.

Four societies generally describe trade as "very good," nine say it is "good," and eight state that it is "moderate."

Board of Trade Awards for Gallantry.

The Board of Trade have awarded the under-mentioned rewards to the master and certain members of the crew of the SS. "Pennsylvania," of Philadelphia, in recognition of their services in rescuing the crew of the SS. "Falcon," of Glasgow, which was wrecked in the North Atlantic on the 16th November 1890:—

A piece of plate to Mr. E. B. Thomas, master, a gold shipwreck medal for gallantry and humanity to Mr. F. B. Crocket, second officer, and a silver shipwreck medal and a sum of 2*l.* to each of the following seamen who accompanied Mr. Crocket in the rescuing boat of the "Pennsylvania": Andrew Morgan, Peter Carlsen Max Jensen, and Thomas Finnegan.

The Board of Trade have awarded their silver medal for humanity to Mr. T. Bath, engineer, in recognition of his praiseworthy services in assisting to rescue the shipwrecked crew of the British ship "Minerva" at Messida, Algiers, on the 13th July 1890.

The Board of Trade have awarded a silver medal and a sum of 2*l.* to Ali Khamis, native boatman at Jaffa, and a sum of 2*l.* each to his assistants, in recognition of their services in rescuing the crew of the boat of the SS. "Arbutus," of Liverpool, which overturned on a reef outside Jaffa, on the 23rd November 1890.

The Board of Trade have awarded a binocular glass to Mr. V. Basson, master of the SS. "Australia," of Bremen, in recognition of his services in rescuing the crew of the schooner "Thessaly," of Liverpool, which was wrecked at sea on the 29th December 1890.

Salmon and Freshwater Fisheries Acts, 1861 to 1886.

(Certificates of Enlargement of Fishery Districts.)

The Board of Trade have granted certificates, dated the 3rd February 1891, enlarging the limits of the under-mentioned fishery districts, and defining those limits respectively as hereunder set forth:—

Tamar and Plym Fishery District.—The limits of the Rivers Tamar and Plym, and of the fishery district of the said rivers,

shall include so much of the sea coast as lies between a straight line drawn in a true southerly direction from the seaward extremity of Rame Head, being the eastern boundary of the Fowey fishery district, and a straight line drawn in a true southerly direction from the seaward extremity of Stoke Point, being the western boundary of the Avon (Devon) fishery district; all rivers and streams flowing into the sea between the said straight lines; the estuaries of such rivers or streams; and all rivers, streams, lakes, and waters tributary to or connected with such rivers, streams, or estuaries, and being within the counties of Cornwall and Devon, and the county boroughs of Plymouth and Devonport; together with that portion of the sea adjoining such sea coast and lying between the said straight lines within which Her Majesty's subjects have, by international law, the exclusive right of fishing, such limits being laid down in the map marked S. 167/1891, and deposited with the clerk of the county council of the county of Devon.

Avon (Devon) Fishery District.—The limits of the River Avon (Devon), and of the fishery district of the said river, shall include so much of the sea-coast as lies between a straight line drawn seawards in a true southerly direction from the seaward extremity of Stoke Point, in the said county, being the eastern boundary of the Tamar and Plym fishery district, and a straight line drawn seawards in a true easterly direction from the seaward extremity of Start Point, in the county of Devon, being the southern boundary of the Dart fishery district; all rivers and streams flowing into the sea between the said straight lines; the estuaries of such rivers or streams; and all rivers, streams, lakes, and waters tributary to or connected with such rivers, streams, or estuaries, and being within the county of Devon, together with that portion of the sea adjoining such sea-coast and lying between the said straight lines within which Her Majesty's subjects have, by international law, the exclusive right of fishing, such limits being laid down in the map marked S. 168/1891, and deposited with the clerk of the county council of the county of Devon.

Dart Fishery District.—The limits of the River Dart and of the fishery district of the said river, shall include so much of the sea coast as lies between a straight line drawn seawards in a true easterly direction from the seaward extremity of Start Point, in the said county, being the eastern boundary of the Avon (Devon) fishery district, and a straight line drawn seawards in a true easterly direction from the seaward extremity of Hope's Nose, in the county of Devon, being the southern boundary of the Teign fishery district; all rivers and streams flowing into the sea between the said straight lines; the estuaries of such rivers or streams; and all rivers, streams, lakes, and waters tributary to or connected with such rivers, streams, or estuaries, and being within the county of Devon, together with that portion of the sea adjoining such sea coast and lying between the said straight lines within which Her Majesty's subjects have, by international law, the exclusive right of fishing, such limits being laid down in the map

marked S. 169/1891, and deposited with the clerk of the county council of the county of Devon.

Teign Fishery District.—The limits of the River Teign and of the fishery district of the said river shall include so much of the sea-coast as lies between a straight line drawn in a true easterly direction from the seaward extremity of Hope's Nose, being the eastern boundary of the Dart fishery district, and a straight line drawn in a true south-easterly direction from a point on the shore opposite the Clerk Rock, south of Dawlish, in such manner as to pass through the said Clerk Rock, being the western boundary of the Exe fishery district; all rivers and streams flowing into the sea between the said straight lines; the estuaries of such rivers or streams; and all rivers, streams, lakes, and waters tributary to or connected with such rivers, streams, or estuaries, and being within the county of Devon, together with that portion of the sea adjoining such sea-coast and lying between the said straight lines within which Her Majesty's subjects have, by international law, the exclusive right of fishing, such limits being laid down in the map marked S. 170/1891, and deposited with the clerk of the county council of the county of Devon.

Inspectors of Weights and Measures.

The following inspectors of weights and measures have, during the month of January 1891, passed the examination provided for in the 11th section of the Weights and Measures Act, 1889:—

Bellamy, John James	Somerset.
Bellamy, Joseph Frederick	Cambridgeshire.
Bennett, Herbert Lever	Bolton.
Brien, Philip	Lancashire.
Bruce, Alexander James	Do.
Bufton, William John	Radnorshire.
Bundy, John Henry	Liverpool.
Candlish, James	Lancashire.
Clarke, Henry Houghton	Warrington.
Clarke, William	Lancashire.
Clubb, Chares Simpson	Do.
Creasor, Willaim	Stockton-on-Tees.
Crick, Nathan William	Somerset.
Denton, William Taylor	Leeds.
Etchells, Herbert Foster Henry	Lancashire.
Finlay, Edward	Do.
Garforth, George Ernest	Nottinghamshire.
Granger James	Leicestershire.
Green, Philip	Lancashire.
Halstead, Evan	Do.
Hanley, Nathaniel	Manchester.
Johnston, Walter Henry	Lancashire.
Kay, John	Do.
Kilpatrick, Robert	Do.
MacDonald, Ewen	Do.

Massey, Samuel Bailey	Manchester.
Reid, David	Lancashire.
Roberts, Thomas George	Wakefield Manor.
Shepherd, James	Lancashire.
Sinclair, William	Do.
Sinkinson, Robert	Accrington.
Smith, Alexander	Lancashire.
Spencer, Edward	Do.
Spriggs, Michael David	Derby Borough.
Watson, Thomas	Gateshead.
Webb, Charles	Lancashire.
Whitworth, John	Walsall.
Wickens, William	Lancashire.
Wills, Edward	Do.

Argentine Emigration Offices.

The following is a copy of a notice issued from the Foreign Office on the 4th instant:—

Her Majesty's Secretary of State for Foreign Affairs has received a note from the Argentine Minister at this Court, announcing that the offices established in the United Kingdom by the Argentine Government for supplying information to intending emigrants, have now been closed.

Invalided Seamen in New Zealand.

A communication, dated the 29th December, has been received at the Board of Trade from the Colonial Office, transmitting copy of an Act passed by the New Zealand Legislature, by which a seaman employed on a home trade ship who is left on shore anywhere in New Zealand on account of illness contracted in the ship's service, shall be entitled to wages till the end of his contract period, or of three months, whichever is the shorter.

Tenders for English Coal required by the Mitan Railway Company.

According to a notice issued by the Foreign Office on the 10th February, the Mitan Railway Company have advertised at Riga for tenders for the delivery of 4,200 tons of English coal; of this amount 1,400 tons from Davison's pits will be required in May next, and 2,800 tons from Buddles or East Hartleys' pits in July and September.

Sealed tenders must be delivered at the offices of the administration of the Mitan Railway Company by the 18th instant and addressed as follows:—"Au die Direction der Mitaner Eisenbahn, Riga," and marked "Lieferung von Steinkohlen." Further particulars can be seen on application to the Commercial Department of the Foreign Office.

II.—QUARANTINE NOTICES.

Norway.

The Board of Trade have received, through the Secretary of State for Foreign Affairs, a despatch, dated January 31st, from Her Majesty's Representative at Christiania, reporting that the Spanish Mediterranean ports were on the 27th January withdrawn from the list of places considered to be infected with cholera. The following places are still regarded by the Norwegian Government as infected with cholera, viz. :—Syria, ports of the Red Sea, East Indies, Philippine Islands, Cochin China, Tonquin, China, Japan, Uruguay, and the Argentine Republic.

Portugal.

The Board of Trade have received, through the Secretary of State for Foreign Affairs, the following telegram, dated January 13th, from Her Majesty's Representative at Lisbon :—"Ports of "Rio de Janeiro and Santos declared free from yellow fever from "December 12th."

The Board of Trade have received, through the Secretary of State for Foreign Affairs, the following telegram, dated January 16th, from Her Majesty's Representative at Lisbon :—"Rio de "Janeiro again declared to be infected with yellow fever from "December 13th."

Spain.

The Board of Trade have received, through the Secretary of State for Foreign Affairs, from Her Majesty's Representative at Madrid, a translation of a notice, issued on the 7th January by the Spanish Ministry of the Interior, intimating that the precautions which have been adopted against the free traffic in, or transit and circulation of, fruit, linen, skins, feathers, furs, wool, cotton, flax, hemp, paper, hides, and every kind of infectious merchandise, even though proceeding from places visited during the last year by cholera, will be abolished.

Austria-Hungary.

The Board of Trade have received, through the Secretary of State for Foreign Affairs, a despatch, dated January 9th, from Her Majesty's Representative at Buda-Pesth, transmitting a translation of a circular which was issued, on the 24th December 1890, by the Hungarian Maritime Government, by which the quarantine measures against arrivals from Spain were revoked, and it was decreed that arrivals from Spanish Mediterranean ports, ports to the west of Gibraltar as far as the frontier of Portugal, and ports of the Balearic Islands should, after a rigorous medical inspection, be admitted to free pratique if found to be in a perfectly normal condition.

Turkey.

The Board of Trade have received, through the Secretary of State for Foreign Affairs, the following telegram, dated 28th January, from Her Majesty's Representative at Constantinople :—"Quarantine against maritime arrivals from coast between Anamour and Alexandretta reduced to five days."

The Board of Trade have received, through the Secretary of State for Foreign Affairs, the following telegram, dated February 4th, from Her Majesty's Representative at Constantinople :—"Quarantine against coast of Caramania, from Anamur "to Alexandretta, inclusively, suppressed, and medical visit "required instead. Quarantine against coast of Syria, from "Alexandretta to Beyrout, exclusively, reduced to five days."

Malta.

The Board of Trade have received, through the Secretary of State for the Colonies, a copy of a notice, dated January 17th, 1891, from the Governor of Malta, directing that the medical inspection of arrivals from Austro-Hungarian ports be discontinued.

III.—POST OFFICE NOTICES.

Conveyance of Single Post Letters by Railway.

On and after the 1st February 1891 certain railway companies which have entered into an agreement for the purpose with the Postmaster-General, will accept and convey by the next available train or steamship, single inland post letters, not exceeding one ounce in weight either to be called for at the station of address, or to be transferred to the nearest post office letter box for delivery by postman.

Mails for the Continent *vid* Ostend. (Alteration of Service.)

The mid-day despatch from London of mails for the Continent *vid* Ostend has been discontinued.

In place of the mail formerly leaving London at 1.10 p.m. a preliminary evening mail will henceforth be despatched at 5.40 p.m.

All correspondence for Vienna and other parts of Austria, as well as for Berlin, Hamburg, Bremen, Leipzig, Frankfort, and other places in North Germany, will gain considerably by being posted in time to leave London by the train despatched at 5.40 p.m. rather than by the night mail at 8.20 p.m., the course of post by the earlier mail being considerably shorter than that by the later mail.

Mails for Venezuela.

In consequence of an alteration in the West Indian service of the Royal Mail Steam Packet Company, postal communication with Venezuela by means of the company's steamers will henceforth take place once in four weeks only, instead of every fortnight as hitherto.

Commencing on the 21st January, mails for Venezuela, intended for conveyance by the company's packets from Southampton, will be despatched from London on the morning of every fourth Wednesday.

Mails for the West and South-West Coasts of Africa.

The following table shows the ports of call for the mail packets leaving Liverpool for the West and South-West coasts of Africa during the remainder of the month of February 1891 :—

Saturday, February 21st. — Grand Canary, Goree, Dakar, Bathurst, Isles do Los, Sierra Leone, Sherbro, Grand Bassa, Kroo Coast, Half Jack, Cape Coast Castle, Salt Pond, Accra, Addah, Lagos, Forcados, Benin, and New Calabar.

Wednesday, February 25th. — Grand Canary, Kroo Coast, Accra, Bonny, Old Calabar, Fernando Po, Cameroons, Eloby, Gaboon, St. Thomas, Loango, Black Point, Landana, Congo, Ambrizette, Kinsembo, Ambriz, and Loanda.

Saturday, February 28th.—Madeira, Teneriffe, Grand Canary, Sierra Leone, Sherbro, Monrovia, Kroo Coast, Grand Bassam, Axim, Cape Coast Castle, Accra, Quitta, Lagos, Forcados, Brass, Akassa, and Opobo.

Extension of Money Order System to the Transvaal.

Arrangements have been made for an exchange of money orders with the Transvaal (South African Republic).

The post offices in the Transvaal authorised to issue and pay such orders are those of Pretoria, Barberton, Johannesburg, Klerksdorp, and Potchefstroom.

Money orders payable at the above-named offices can be obtained at any money order office in the United Kingdom, and should be forwarded direct to the payees by the remitters.

The commission charged is identical with the rates in force for foreign and colonial money orders generally, viz.:—

	s.	*d.*
For sums not above 2*l.* - - - -	0	6
For sums above 2*l.* and not exceeding 5*l.* -	1	0
For sums above 5*l.* and not exceeding 7*l.* -	1	6
For sums above 7*l.* and not exceeding 10*l.* -	2	0

No money order sent in either direction can be granted for a sum exceeding 10*l.*

IV.—TARIFF CHANGES AND CUSTOMS REGULATIONS.

Russia.

Regulations affecting Imported Goods carried in Transit by Rail.

The *Economiste Russe* for the 27th December says that by decree of the 26th October 1890, according to the terms of the decision of the Imperial Council sanctioned by the Emperor, the Minister of Finance has approved of the following regulations concerning the transport in transit by railways in Russia of imported merchandise :—

1. The transit of foreign goods in Russia by railway can only take place in the directions authorised by the Minister of Finance.

Note.—The transit into Persia *vid* Transcaspia is prohibited.

2. Those goods only can be carried in transit which are accompanied by the way-bills and other documents of foreign railways attesting the *bona fides* of the transit. The point of departure from the frontiers of the Empire indicated in these documents can only be changed with the authority of the Minister of Finance.

3. The papers relating to the consignment in transit, as well as the method of their presentation to the Customs on entry, must be in conformity with the temporary regulations of the 3rd October 1887 on the transport by railways of imported merchandise subject to Customs regulations.

4. Transit goods are placed under the supervision of the Customs from the time of their arrival on the frontier to that of their exit.

5. Immediately on the arrival of the consignment, the Customs authorities verify the number of packages, and, in case of re-loading, their gross weight, and mention, if they see fit, on the papers the differences which may be discovered on their examination. The weight of goods loaded in bulk in the waggons may be verified (1) by the weight of the loaded waggon in event of the waggon going without re-loading ; and (2), in case of re-loading, by the weight of the new waggon with its load.

6. Damaged packages must be re-packed immediately at the cost of the railway which continues the transport, and mention must be made on the documents accompanying the packages that the damage has been done.

7. Goods in transit discharged at the Customs can be warehoused in their entirety during the period fixed for the presentation of the declaration, or even sent to their destination, also as a whole. A partial consignment or dispatch is not allowed.

8. The loading and the transport of goods in transit on the territory of the Empire, the responsibility of the railways and the Customs are fixed by the provisional regulations of the 3rd

October 1887 affecting the transport by railways of the merchandise subject to Customs duties.

9. On arrival of the consignment at the out-going Custom house, the authorities at the latter verify, in presence of an agent delegated by the railway, the seals placed by the authorities at the arrival Custom house on the packages and waggons, as well as the gross weight of the goods re-loaded or loaded without package (5); if no irregularity is discovered, the Customs allow the goods to pass the frontier under their supervision, and return the documents with their observations affixed.

10. In a case where the out-going Customs discover on examination any discrepancy in the documents accompanying the goods, a *procès-verbal* is drawn up signed by the employés of the Customs and the agent delegated by the railway without delaying the transit of the goods. This *procès-verbal* is then to be sent to the Customs administration, and a fine will be inflicted upon the railway company in fault.

Re-exportation of Dutiable Goods.

By decree dated the 25th October 1890, the Russian Minister of Finance has, says *L'Economiste Russe* for the 27th December, approved the following regulations affecting the re-exportation of foreign goods which have not paid Customs duty:—

1. The re-exportation of imported merchandise on which the import duty has not been paid may be effected through all the seaport and railway Custom houses.

2. All goods, whether they have been declared or examined or not, can be re-exported without payment of duties.

3. Goods can only be re-exported in unbroken packages.

4. The demands for re-exportation may be presented (1) to the railway Customs (*a*) by the exporting agent of the railway, who is bound to produce papers proving that the holder has the right to dispose of the goods, and (*b*) by the owner of the goods, who must prove that the transport and other expenses have been paid to the railway; (2) to the Customs authorities at the seaports by the captains of ships and the owners of goods.

5. The persons specified in § 4 must, on each demand for re-exportation, present a declaration on stamped paper, showing—

(*a.*) The numbers, marks, and addresses on the packages containing the merchandise to be re-exported.

(*b.*) The description of the goods, and their gross weight.

(*c.*) For goods not yet declared at the Customs,—the numbers of the bills of lading and way-bills, as well as other ship's papers.

6. When the merchandise to be re-exported has not been declared for importation, it is re-exported without Customs examination. The Customs authorities have, however, if there appear to be grounds for suspicion, the right to make this examination. The declared goods may be examined even if the

demand for re-exportation has been presented before the expiration of the period fixed for the visit.

7. Goods visited on declarations are, before their re-exportation, examined by the Customs authorities, who draw up a report of the examination, and efface the marks placed there on a first examination.

8. The authority for re-exportation does not acquit the persons interested of the responsibilities incurred for irregularities in the transport and examination papers, as well as for non-declarations within the authorised periods.

9. If the merchandise to be re-exported requires re-packing, this is done at the Customs warehouse, at the expense and in the presence of the person who has presented the demand, and under the supervision of a Customs employé.

10. Transport to the interior of the Empire, as far as the out-going Customs, of merchandise to be re-exported, is effected under the conditions determined by the regulations relating to transport from Customs to Customs of imported merchandise on which the import duties have not yet been paid.

11. The effective clearance of the goods from the frontiers takes place under the supervision of the employés of the out-going Customs, who draw up a report, and forward it to the Customs at which the goods were entered.

GERMANY.—POSSESSIONS IN EAST AFRICA.

Regulations affecting Trading Operations.

It appears from a notice, published in the *Reichsanzeiger* of the 24th December 1890, that the German Government does not intend changing the rates of duties at present levied in the German possessions on the East Coast of Africa, nor the regulations established by the treaties concluded by the Sultan of Zanzibar.

The Imperial Commissioner for East Africa has been instructed to publish a proclamation to the under-mentioned effect. A reference to this proclamation appeared on p. 15 of the *Board of Trade Journal* for January last.

"After the 1st January 1891, imports and exports of goods on the German coast of East Africa will only be permitted at the following eight ports :—

Tonga, Pangani, Soudani, Bagamoyo, Dar-es-Salam, Rilwa, Luidi, and Mikindani.

"Offenders will be severely punished, and goods imported or exported in other than the places specified will be confiscated.

"After the 1st January the collection of Customs duties on the coast will take place on account of the Imperial Government."

The *Reichsanzeiger* remarks that in future goods coming from the island of Zanzibar will be liable to duties as coming from abroad.

Exception will not be made for goods which have already paid duty in the island of Zanzibar. It is, therefore, better to forward goods destined for the East Coast of German Africa, not to the island of Zanzibar, but the ports of that coast where Customs offices are established.

SWITZERLAND.

Customs Decisions.

Note.—Quintal = 220·4 lbs. avoirdupois. Franc = $9\frac{6}{10}d.$

The following decisions affecting the classification of articles in the Swiss Customs tariff were given by the Swiss Customs authorities in the month of December last :—

Soaps for metal cleaning are removed from Category 9.

Alarums are expunged from Category 103. Clocks with alarums must pay duty as common or superior, according to condition.

Transportable rails (Decauville) are taken out of Category 105 and are included in Category 129. Duty, 3 frs. per quintal.

Pegs of iron or steel, for regulating the tension of piano strings. —Category 130. Duty, 7 frs. per quintal.

Tool boxes, complete, are removed from Categories 130, 130 (2), 131, and 131*a*.

Tool boxes, complete, for which distinct declarations of the weight for the box and for the tools have not been made, must pay duty on the total weight at the rate of the article paying the highest duty ; for example—

a. Small boxes, common, with ironwork, tools, plain, or simply ground, 15 frs. per quintal under Category 64.

b. Small boxes, polished, tools, plain or simply ground, 16 frs. per quintal according to Categories 65 and 66.

c. Small boxes, plain or varnished, tools, polished, 20 frs. per quintal according to Category 131*a*.

In event of the small boxes and tools being declared separately, they each pay duty according to nature and condition.

Plane irons, polished, imported without the planes or distinct from the latter.—Category 131*a*. Duty, 20 frs. per quintal.

Mineral soaps (soaps containing mineral substances).—Category 264. Duty, 1 fr. 50 c. per quintal.

Packing cloth, impregnated with tar.—Category 311*a*. Duty, 3 frs. per quintal.

SPAIN.

Changes in Customs Tariff.

Note.—Kilogramme = 2·204 lbs. avoirdupois. Peseta = $9\frac{6}{10}d.$

The *Official Gazette* publishes in its number of the 26th December 1890, a decree, according to which certain alterations in the Customs tariff to come into operation on the 1st January 1891,

are effected. The new rates of duty are as follows:—Saddle-horses, 180 pesetas; other horses and mares, 135 pes.; mules, 80 pes.; asses, 12 pes.; cattle, 40 pes.; swine, 20 pes.; and sheep and goats, 2 pes. each; salted meat, 11·60 pes. per 100 kilogrammes; bacon and lard, 14·50 pes. per 100 kilos.; other meat, 18 pes. per 100 kilos.; rice in the husk, 5·30 pes. per 100 kilos.; hulled rice, 10·60 pes. per 100 kilos.; corn, 8 pes. per 100 kilos.; flour, 13·20 pes. per 100 kilos.; other cereals and seeds, 4·40 pes. per 100 kilos.

Customs Regulations.

A communication, dated the 14th January, has been received from the Foreign Office, transmitting copies of papers which have been communicated to the North of England Protecting and Indemnity Association, in reply to an inquiry with respect to grain bags on board British vessels and the best means of dealing with ship's fines. These papers are as follows:—

Extract from the "Spanish Customs Regulations," 1884.

Art. 54.—All masters of vessels with cargo of goods proceeding from foreign ports, whether bringing the said cargo in transit, for bond, for transhipment, or for the market, must on reaching the Spanish waters be provided with a manifest fully filled up and signed, in which shall be included all the ship's cargo, the master's "ventures," and the "commissions" which the ship carries; and this document must have the visa of the Spanish Consul at the port of origin, if there be one there; and in case there be no Spanish Consul at the port of departure, the visa of the local authority, the Controller of Customs, or the Consul of a friendly nation.

Exemption from the consular visa is extended to manifests of vessels in ballast and to those which carry goods, the duty on which, all told, does not exceed 50 pesetas per 1,000 kilos., provided that such goods constitute the whole and sole cargo of the vessels.

Art. 46.—Immediately on the arrival of the vessel in port, the master, when handing in the manifest, shall present a memorandum in which he shall specify—

1. The amount of pig iron carried as ballast.
2. The provisions and stores for ship's use.

The following shall be considered to be provisions for ship's use: oil, brandy, or rum (*aguardiente*); rice, sugar, tar, or pitch (*brea*); candles, coffee, coal, coke, or charcoal (*carbones*); fresh and salt meat, beer, chocolate, preserves, sweetmeats, biscuit; barley, beans, and peas (*granos*): flour, eggs, dried vegetables, fuel, spirits, butter, bread, potatoes, soap-stuffs, fish, salt; suet or tallow (*sebo*); cider, tobacco, tea, wine, vinegar, and other eatables, drinkables, and combustibles.

The following shall be considered to be ship's stores: anchors, arms, and ammunition for the defence of the vessel, barrels, hemp, cordage, matting, common timber; spare yards and masts (*maderas*

de arboladura) ; casks and empty sacks, to be used for stowing cargo, as well as articles which the Customs authorities may consider, having regard to their amount and kind, as intended for the service of the ship.

When vessels leave for foreign countries the amount of all the articles on board which have been declared as stores shall be stated ; and if there were none, or if the master did not exhibit them at the time of the Custom house visit, the penalty specified in case 11 of Article 246 shall be incurred.

If the master asks permission to land and clear articles declared as ship's stores, he shall incur the penalties specified in case 12 of Articles 246 for having failed to declare them in the *viséd* manifest.

If he should make use of any of these stores for the stowage of his cargo, he shall inform the Customs authorities *in writing*, so that the transaction may be inspected, and that the same may be taken account of as being on board at the time of sailing of the vessel.

They shall, likewise, hand in a memorandum of the total number of passengers carried, and of the number of packages composing their luggage, stating clearly their ports of destination.

In forwarding these translations to the association, the following memorandum by the Foreign Office was enclosed :—

The secretary in preparing the new edition of suggestions which he proposes making on the part of the association to masters of vessels, should on no account omit to insert a warning to such masters, enjoining them, when proceeding to any Spanish port in the Peninsula or in any Spanish colony or possessions, to provide themselves with a manifest duly filled up and signed by them, and *viséd* by the Spanish Consul at the port of departure.

The secretary should also lay great stress on the fact that in the event of there being no Spanish Consul at such port of departure, the master must then seek the Consul of some friendly nation, or a local authority at such port, who, in the absence of a Spanish Consul, would place a visa on his manifest.

The above rule does not apply to vessels in ballast, but it should be observed that this last exemption does not apply to Cuban waters.

It is a notorious fact that a very large proportion of the fines which are inflicted on trading vessels is to be solely ascribed to the fact of masters of vessels neglecting to comply with this rule when they happen to find no Consul at the port from which they are sailing

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Spain.—Philippine Islands.

New Customs Tariff and Regulations.

Sir F. Clare Ford, Her Majesty's Ambassador at Madrid, in a despatch to the Foreign Office, dated the 13th January, encloses copy and translation of a Royal decree, together with the new Customs tariff for the Philippine Islands published in the Madrid

Official Gazette of the 8th January. The following is an extract from the translation of the Royal decree:—

Art. 1. The accompanying import tariff shall be enforced on the 1st of April of the present year for all foreign goods imported into the Philippine Islands, irrespective of the flag under which they may be carried.

Art. 2. From the same date all duties at present imposed on merchandise under the heading of 50 per cent. of surcharge on discharging, on ship's stores, and on navigation are to be abolished.

Art. 3. This tariff will apply to all merchandise arriving at the ports of the archipelago on the 1st of April of the present year, and to all arriving at the Philippines after that date.

Art. 4. This tariff will not be applicable to Spanish products (and therefore these shall be considered as exempt from payment of duty) carried direct to the Philippines under the Spanish flag from the ports of the Peninsula, the adjacent islands and the Spanish West Indies; and this exception shall extend to the same products when carried to those islands by the Suez route, even though on the way they be transhipped to foreign vessels, provided always that they left Spanish ports under the national flag, that they arrive under the same, and that the goods are carried in their own cases bearing the same marks with which they were despatched by the Customs at their port of origin.

In order that the exemption from duty in favour of Spanish products, ordained by this article, may become effective, it shall be necessary both on the despatch of these goods from the ports of the Peninsula, the adjacent islands, and the Spanish West Indies, that the formalities and the requirements established by the Customs regulations and instructions shall be fulfilled.

The failure to comply with any of these formalities or requirements will entail the payment of the duties which would be applied to foreign goods.

Alcohols and common brandies which are not entirely made of spirit derived from the grape and its residuum, although the product of the Peninsula, the adjacent islands, and the Spanish West Indies, shall not share in the immunity from import duties enjoyed by Spanish merchandise under this article.

Art. 5. The export duties paid on tobacco, whether in leaf or in a manufactured state, shall be suppressed.

Art. 6. Goods of all kinds exported from the ports of the archipelago shall pay, from the 1st of April of the present year, at the rate of a dollar per ton of 1,000 kilogrammes gross weight, as a cargo due without distinction as to the port of destination of the goods, or the flag under which they are carried.

Art. 7. Goods proceeding from the Peninsula, from the colony (Philippine Islands), or from foreign countries, which are conveyed from one Philippine port to another, whether declared or not for the coasting trade, shall pay a "cargo due" amounting to 50 centavos per ton on the gross weight of 1,000 kilos. in the form determined by the regulations.

Art. 8. Goods proceeding in ocean traffic, both from the Peninsula, the adjacent islands, and from the Spanish West Indies, which are transhipped in transit for the qualified ports of the archipelago, and the free ports of Jolo, shall pay at the port of transhipment 50 centavos per 1,000 kilos. gross weight.

Art. 9. No exceptions or abatements of duty shall be made in any case in favour of any manufacture, public establishment, company or person, whatsoever, except those specified in the regulations of this tariff.

Articles paid for out of the public funds and destined for the public service, and materials of all kinds for works carried out by the executive and not by contract, shall be exempt from the import duty according to the forms laid down in the regulations.

All other articles, though destined for works of public utility, for the State, the province, or the municipality, shall pay their respective tariff duties.

Art. 10. All the regulations contained in the present tariff shall be interpreted in their literal sense, and doubts which may arise regarding their application shall be resolved exclusively by the Government of His Majesty through the Minister of the Colonies.

Art. 11. All the rules, memoranda, index, and appendices which form part of the following tariff are declared to be in force, and the Philippine Custom houses are to act in accordance with them in the levying of the tariff duties on the goods which they include.

Art. 12. All regulations which are explicitly or implicitly opposed to the enactments of this Royal decree shall be repealed.

In a further despatch to the Foreign Office, dated the 15th January, Sir F. Clare Ford, encloses copy and translation of a Royal decree dated the 7th January, together with a copy of the new provisional Customs regulations which have been issued for the Philippine Islands. The following is the translation of the decree prefixed to the new Customs regulations:—

Art. 1. The following Customs ordinances are declared to be in force in the Philippine Islands: They are of a provisional character, and they are to replace the regulations which are at present in force in the archipelago, or any alterations with regard to them which may have subsequently been made.

Art. 2. Six months after these ordinances have been put into force, and during the following six months, merchants and corporations of a commercial character in the archipelago are empowered to send reports in writing, either individually or collectively, to the Central Customs Administration, making such observations as they may consider expedient with regard to the effect of the enforcement of these ordinances and suggesting any changes which they may consider desirable.

Art. 3. The Central Customs Administration, after having studied all these suggestions, will remit their opinion thereon to

the "*Intendencia General*" of the Finance Ministry, who, after having obtained all the necessary data, will forward to the Minister of the Colonies the report on this question with such remarks as they may think expedient.

Art. 4. The Minister of the Colonies will appoint a commission who, having before them all these data, as well as the ordinances published in the Peninsula, will proceed to draw up a definite set of regulations for the Philippine Islands, and will lay them before the Minister for his approval.

[A translation of the statement of the rates of import duty leviable in the Philippine Islands will be published in a forthcoming number of the *Board of Trade Journal*. In the meantime, copies of the new Customs tariff and the new Customs regulations in original may be seen on application at the Commercial Department, Board of Trade, S.W.]

ITALY.

Customs Decision.

According to a decree of the Italian Government, dated the 31st December last, girths formed of cords held together by a string passing through them at regular intervals are assimilated as regards payment of import duty to cordages according to the materials of which they are made.

Customs Regulations at Port of Ancona.

Mr. A. P. Tomassini, British Vice-Consul at Ancona, writing with regard to the Customs regulations in force at that port, says:—

Great complaints are continually being made against the Customs regulations for the entry of goods subject to duty in the bonded stores "Punto Franco."

The cargoes of sugar that arrive at this port are all discharged into lighters and conveyed to the "Punto Franco," where from the insufficiency of accommodation they remain sometimes 15 days or more before being landed.

In the meantime the ships that have brought the cargoes finish discharging and are ready for departure; however, before being allowed to do so, the master must deposit the sum of at least 2,000 lire (80*l.*) as a guarantee that the quantity, as per manifest, shall be discharged from the lighters.

During the process of discharging from the ship the consignee gives receipts for quantity received in the lighters, but the Customs authorities will not grant clearances until the cargo has been tallied on shore or a deposit made.

The cargoes remain in the lighters at the risk of the vessel, the master having no guarantee against theft, eventual short output, or other risks.

Heavy fines are imposed when the cargo is over or under the quantity manifested, which the vessel must pay notwithstanding that receipts had been already given by the consignee for number and quantity as per bill of lading.

The fines imposed are recoverable from the consignee, but in many cases recourse must be had to law, which entails time and expense.

Exchange during the year varied from 25 lire 40 c. to 25 lire 60 c. per 1*l.* sterling.—(*No.* 809, *Foreign Office Annual Series.*)

Morocco.

Regulations affecting Export of Wheat and Barley.

According to a communication from the Foreign Office, dated the 7th January, Her Majesty's Consul at Tangier has reported by telegraph that the Moorish Customs officers have received orders to permit the exportation of wheat and barley on the conditions set forth below :—

It has been determined to permit the embarkation (exportation) of grain, comprising therein (in the embarkation) wheat and barley ; the wheat to be subjected to a duty of fifteen (reals) vellon the strike fanega, and a duty of six (reals) vellon the strike fanega of barley, for a term of three years to commence from the month of the present date, on the condition that the purchasing and selling which will arise therefrom (the permission to export wheat and barley) between the subjects (natives) and the merchants must be for ready money and not on credit or on advances, and on the condition, if there is a deficient crop or entire failure—may God avert it—during the said term of years (three) then the Shereefian Presence (the Sultan) would prohibit the free exportation after having notified to the merchants the prohibition through the medium of the representatives ; and, after a notice of two days, the merchants must give an account to the Administrators of Customs of the ports of the quantities they may hold in their stores of those grains (wheat and barley), and after eight days they (the merchants) must also give an account to the Administrators of Customs of the quantities (of wheat and barley) held in the country by their semsars, when the administrators would accord them a term of six months to export the quantities in their possession, and after the expiration of the term of three years the Shereefian Presence will consider whether it is expedient to permit or to prohibit the exportation of the aforesaid grain. Peace.

12 Showal 1307 (1st June 1890).

Signed by the Moorish Minister for Foreign Affairs and twenty Chief Administrators of Customs.

China.

Additional Article to Agreement between Great Britain and China.

A Parliamentary Paper has just been issued containing the text of an additional article to the agreement between Great Britain and China of September 13th, 1876, signed at Pekin on the 31st March, 1890. This additional article is in respect of British trade in the Chinese ports of Ichang and Chungking.

United States

Filing of Briefs, &c. by Importers in support of Protests and Appeals

The following is a copy of a circular issued by the United States Board of General Appraisers on the 15th November in regard to the filing of briefs, &c. by importers in support of their protests and appeals:—

To Collectors of Customs:

1. Hereafter, upon receiving notice of dissatisfaction with the rate and amount of duties charged upon imported merchandise in cases where all the requirements of section 14 of the Act of June 10th, 1890, have been complied with, we ask that you will please notify importers, their agents, attorneys, or other persons duly authorised to act for them, and they are invited to file with their objections a brief or written argument in support of the protest and appeal made by them. Such brief or argument will be deemed a part of the case submitted to the Board of General Appraisers.

2. In addition to the brief of written argument, the Board of General Appraisers will, in their discretion, and in cases where they entertain serious doubt, invite further brief or oral arguments on points to be suggested by said board.

Customs Decisions.

The following decisions of the Treasury Department at Washington, and of the United States Board of General Appraisers at the port of New York, upon the construction to be given to Acts of Congress relating to the classification of articles in the Customs tariff and the application of the Customs laws of the United States, have recently been published by the Treasury Department:—

Paintings on glass consisting of pictures illustrating the life of Joseph, and being pictorial historical paintings on glass to be hung or fastened on the inside of a church window, are properly entitled to exemption from duty under the provisions in paragraph 757 for works of art, including pictorial paintings on

glass imported expressly for presentation to an incorporated religious society.

Metalophones are dutiable as musical instruments at the rate of 25 per cent. *ad valorem*, under T.I. 469.

Carriage steps requiring boring and fitting before being put upon the vehicles are dutiable at the rate of 35 per cent. *ad valorem* as carriages and parts thereof specially provided for in paragraph 412.

Plated zinc sheets are properly dutiable at 35 per cent. *ad valorem* under paragraph 210.

Iron wire hair pins are dutiable at 45 per cent. *ad valorem*.

So-called binitro toluole is dutiable at the rate of 25 per cent. *ad valorem* under paragraph 92 of the Tariff Act of March 3rd, 1883.

So-called naphthol sulpho acid is dutiable at the rate of 25 per cent. *ad valorem*.

Small fragments of marble, such as are commonly called marble mosaic, prepared by process of manufacture into diminutive pieces of rectangular shape, some of them $\frac{1}{2}$ in. cubes, are classified under paragraph 468 of the Tariff Act of March 3rd, 1883, as manufactures of marble not specially enumerated or provided for in the Act, and the rate of 50 per cent. duty is assessed thereon.

So-called bronze powder, consisting of pure silver powder, is assessed for duty at 45 per cent. under paragraph 216.

Scalloped edged cotton goods, about $\frac{1}{2}$ in. in width, embroidered in the loom with silk, the latter material constituting the component material of chief value, commercially known as galloons, and corset trimmings and corset bindings, are dutiable at 50 per cent. *ad valorem* under paragraph 412, Schedule L., Act of October 1st, 1890.

Tennis balls are dutiable at 35 cents per pound and 40 per cent. *ad valorem* under the provisions of paragraph 362, Act of March 3rd, 1883.

Photograph albums, known as cabinet style, about 7 ins. in width and 15 ins. in length, containing each nine paper leaves, of a silver-grey finish, about $\frac{1}{8}$ of an in. in thickness per leaf, bound together in book form, faced with satin, the whole covered with cotton back silk plush, are dutiable at 15 per cent. *ad valorem*, under paragraph 388.

Certain so-called "horse cloth" or horse sacking, consisting of a coarse jute fabric similar in appearance to jute bagging, is dutiable at 40 per cent. *ad valorem*.

Small, irregular-shaped pieces of fur cut from dressed hare skins are dutiable at 10 per cent. *ad valorem* under paragraph 493.

Hat crowns, being simply flat pieces of wool and silk, designed probably for use in the making of hats, but not even shaped, are dutiable under paragraph 362 at 35 cents per pound and 40 per cent. *ad valorem*.

Articles made from metal and glass, designed and intended to keep the hair in place, and being in fact combs with three teeth, similar in appearance and purposes of use to what are defined as

combs by Webster, are dutiable at 30 per cent. *ad valorem* under paragraph 419.

Fish paste is assessed for duty under paragraph 284 of the Act of 1883 at 35 per cent. for sauces of all kinds.

India-rubber footballs covered with leather, of which india-rubber is the component material of chief value, are dutiable at the rate of 30 per cent. *ad valorem* under the provisions of paragraph 463 of the Act of 1883.

Knitted goods manufactured from worsted, not commercially known as bonnets or hoods, but as caps, are dutiable in accordance with their weight and value under the provisions in T.I. 363 for wool knit goods.

Monogram or "initial" towels, table cloths, &c. are not dutiable as embroideries.

Steel wire ranging from No. 9 to No. 19 wire gauge, all valued in the invoice at more than 4 cents a pound, is dutiable at 45 per cent. under the fifth provision of paragraph 148 of the Act of October 1st, 1890.

Felted wool hats varnished, valued at over 80 cents per pounds, are dutiable at the rate of 35 cents per pound and 40 per cent. *ad valorem* in accordance with the provisions of paragraph 363 of the Act of 1883.

Dandelion root is dutiable at 2 cents a pound under paragraph 290, Act March 3rd, 1883.

Marking, Stamping, Branding, &c. of Imported Goods and Packages under Section 6 of the Act of October 1st, 1890.

The following is a copy of a circular issued by the Treasury Department of the United States at Washington on the 20th December last:—

Section 6 of the Act of October 1st, 1890, provides as follows:—

That on and after the 1st day of March 1891 all articles of foreign manufacture, such as are usually or ordinarily marked, stamped, branded, or labelled, and all packages containing such or other imported articles, shall respectively be plainly marked, stamped, branded, or labelled in legible English words so as to indicate the country of their origin, and unless so marked, stamped, branded, or labelled they shall not be admitted to entry.

While the question as to whether goods imported on and after March 1st, 1891, are properly "marked, stamped, branded, or labelled" under the above provision is to be decided by collectors of Customs at the time of importation, and the language of the section is so plain as to hardly require an interpretation by the Department, yet, in view of the great number of inquiries received from importers and others, it is deemed proper to publish some of the conclusions reached by the Department in the premises for the information of all concerned.

1. While only such goods or articles of foreign manufacture "as are usually or ordinarily marked, stamped, branded, or labelled" are required to be so marked, &c. on and after the 1st of March

1891, yet it will be observed that *all packages*, outside or other, containing any imported merchandise, must be so marked, &c. to entitle the contents thereof to entry at the Custom house.

2. In the case of champagne wines, mineral waters, &c. in labelled bottles, the law will be substantially complied with if the outside packages are marked with the name of the country of origin.

3. In the case of small articles which cannot be readily marked, the marking of the inside cartons and outside packages will be sufficient.

4. Sheets of zinc, tin-plate, and similar articles which are not usually stamped, except to indicate gauge, &c., may be admitted to entry if the packages containing the same are marked, stamped, &c.

5. In the case of bottles with more than one label containing imported goods, the law will be complied with if but one of the labels thereon bears the name of the country of origin.

6. The prefix "from" placed before the name of the country of origin, as, for instance, "*from* France," "*from* Germany," &c. is not essential, the law requiring simply the name of the *country* of origin to appear.

7. In the case of marking of bags containing muriate of potash, guano, and other like articles, where the marks are likely to become obliterated owing to the goods absorbing moisture while on the voyage of importation, the sweating of the bags, and handling, &c., before reaching destination, it is held that, as the admission to entry of such goods on and after March 1st, 1891, is dependent upon their being plainly marked, &c., the shipper, importer, consignee, or agent, should see that such marking shall, by some one of the means required by the law, appear indelibly on the bags at the time of importation.

8. Labels, &c., specifying the place of manufacture, and not the country, as, for instance, "Paris," "London," "Berlin," &c., do not comply with the law, and such name of the city of origin in addition to the name of the country is not necessary.

9. In the case of watches which are ordinarily stamped, &c., the name of the country of origin should appear thereon; and it is held that in the case of such importations, from Switzerland, for instance, the word "Swiss" will meet the requirements of the law.

10. Fire-brick and other similar rough articles imported in bulk need not be marked.

11. Goods coming from England, Scotland, Ireland, and Wales, may be marked "Great Britain," but goods marked "England," "Scotland," &c., would not be excluded. It is held, however, that the name of the mother country of origin appearing on goods instead of the names of kingdoms, states, or divisions of countries, would more closely meet the requirements of the law.

12. Wool and other articles produced in the East Indies, Africa &c., but shipped from ports in Europe, should be marked with the name of the country of origin.

13. In the case of surgical instruments, physicians' supplies, chemical apparatus, and other similar articles which are usually packed in cartons, it will suffice if the cartons and outside packages containing the same are marked with the name of the country of origin.

14. Articles and packages may be marked either by stamping, branding, or labelling, as the party may choose.

15. In the case of pencils, steel pens, tooth brushes, liquorice stick, common crockery, &c., the law will be complied with if the cartons and packages containing the same are marked.

16. Lead and tin in pigs, which are ordinarily and usually marked, &c., should also be marked with name of the country of origin.

17. Unmanufactured substances need not be marked, but whenever contained in packages the packages should be marked, &c.

18. The law does not require the name of the importer, shipper, or maker to be marked, stamped, &c. on imported articles or packages.

19. Marking by stencilling with some indelible material would be a compliance with the law.

20. It is held that the word "Scotch" appearing on goods coming from Scotland would be sufficient under said provision.

21. In the case of kid gloves, the law will be complied with if the name of the country of origin is made to appear on the bands surrounding a number of pairs of gloves, and not on each individual glove.

22. The placing of labels on anvils and other like articles, giving the name of the country of origin; the abbreviation "Eng." as indicating England; the placing of the name of the country of origin on bands inclosing bundles of metal bars, would be admissible under the law, and goods coming from any of the islands of the West Indies may be marked "West Indies."

Costa Rica.

Regulations affecting Ships' Manifests.

Mr. C. Sharpe, Her Majesty's Consul at San José, Costa Rica, in a report to the Foreign Office, dated the 8th December, forwards the following translation of a notice issued by the Government of Costa Rica amending Article 59 of the Fiscal Code, which deals with the preparation of ships' manifests:—

"Art. 59. Ships' manifests should be written in Spanish, and should state the name, description, nationality and tonnage of vessel the name of the captain and number of crew, the port from whence arrived, the name of the consignee, quantity, mark, and number of packages of the cargo, the different classes of merchandise contained in same, the name of the shippers and

to whom consigned, the date, signature of the captain, and enumeration of the ship's stores.

"These documents will not be accepted if they are not in accordance with the foregoing article, or if they contain erasures or amendments."

COLOMBIA.

Reduction of Import Duties at Tumaco.

Mr. T. H. Wheeler, Her Majesty's Minister at Bogota, in a despatch to the Foreign Office, dated 29th November, states that by a law recently passed by Congress, the import duties on all foreign goods introduced into the port of Tumaco, on the Pacific coast of Colombia, are to be reduced by 25 per cent.

"This reduction was to come into effect in January 1891, and to be made in accordance with the terms of Article 205 of the Constitution, which provides that all reductions of import duties shall be made by tenths, at intervals of a month. The whole reduction will therefore not be completed till October 1891, 2½ per cent. being taken off each month from January onwards."

CANADA.

Form of Declaration for Imported Merchandise.

The following is a copy of an order of his Excellency the Governor-General of Canada in Council, given on the 11th December, respecting the form of declaration to be made by the foreign owner of any goods shipped to Canada on consignment:—

His Excellency, in virtue of the powers vested in him by section 252 of the Customs Act, chapter 32 of the Revised Statutes, and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the form of declaration to be made by the foreign owner of any goods shipped to Canada on consignment, being Form 6 prescribed by the Order in Council of the 25th day of July 1888, chapter 14 of the Consolidated Orders in Council of Canada, prescribing forms of oath required under the above-cited Act, as well as the like form of declaration prescribed by the Order in Council of the 19th of May 1881, shall be and the same are hereby cancelled, and the following substituted in lieu thereof:—

Form 6.—Declaration to be made by the foreign owner of any goods shipped to Canada on consignment before the collector or the mayor or other chief municipal officer at the place in the United Kingdom or other place in Her Majesty's possessions abroad from whence the goods are shipped, or before a notary public; and at any other place, before a British Consul, or if there is no British Consul, then before a foreign Consul at such place. (*Vide* section 152, Customs Act, chapter 32, Revised Statutes):—

I, of do solemnly and truly declare that I am (a member of the firm of , giving the name when not the individual owner) the owner of the goods shipped on consignment to (name of consignee) at , in Canada, and described in the annexed invoice. That the said invoice contains a full and true statement of the fair market value when sold for home consumption of the said goods at the time and place of the exportation thereof direct to Canada. That such fair market value includes any bounties, drawbacks, royalties, rents, or charges that may have been or are expected to be allowed or paid on the said goods, or is payable on patent rights, or because of the lease of such goods, or for the right of using the same, and that no different invoice or account thereof has been or will be furnished to anyone by me or on my behalf.

Signed and declared before me at this day of 189 .

South Africa.

Admission of Basutoland into Customs Union.

The *Cape of Good Hope Government Gazette* for the 30th December publishes the text of a proclamation by Sir Henry B. Loch, Governor of the Cape of Good Hope, dated the 27th December, admitting the territory of Basutoland into the South African Customs Union from the 1st July 1891.

Queensland.

Tariff Change.

According to an Act recently passed by the Legislative Assembly of New Zealand, the duties on the following articles, which are raised from 12*s.* to 14*s.* per gallon, were to take effect from the 19th September last:—

Spirits or strong waters, excepting perfumed spirits, of any strength not exceeding the strength of proof by Sykes' hydrometer, and so in proportion for any greater strength than the strength of proof, 14*s.* per gallon.

Spirits, cordials or strong waters, sweetened or mixed with any article so that the strength thereof cannot be exactly ascertained by Sykes' hydrometer, 14*s.* per gallon.

New Zealand.

Continuation of Primage Duty.

According to an Act recently passed by the General Assembly of New Zealand, a primage duty of one pound per centum is to be levied on the value of all articles (with the exception of live animals and specie) imported into the colony until and including the 30th September next.

V.—CUSTOMS DUTIES ON THE IMPORTATION OF RICE AND RICE MEAL INTO VARIOUS FOREIGN COUNTRIES.

Statement showing the rates of import duty leviable in each of the under-mentioned countries on rice and rice meal (so far as the particulars can be stated) according to the latest information in the possession of the Board of Trade.

Tariff Classification in each Country.	Rates of Duty.	
RUSSIA:		Rbl. Cop.
Rice, cleaned	Poud	0 84
„ not cleaned (in the husk)	„	0 48
„ meal and flour	„ (gross)	0 14
SWEDEN:		Kron. Öre.
Rice, not cleaned, or Paddy	100 kilos.	2 50
„ cleaned	„	2 50
„ meal and flour	„	4 30
NORWAY:		Kron. Öre.
Rice, not cleaned, in bulk	100 kilos.	3 90
„ „ in bags, &c.	Kilog.	0 05
„ cleaned	„	0 10
„ meal	„	0 10
DENMARK:		Kron. Öre.
Rice in the husk	Pund	0 02½
„ not in the husk	„	0 04⅜
„ meal	„	0 04⅛
GERMANY:		Mks. Pf.
Rice, cleaned or not	100 kilos.	4 00
„ meal	„	10 50
HOLLAND:		
Rice		Free.
„ meal and flour		Free.
BELGIUM:		
Rice, cleaned or not		Free.
„ flour		Free.
FRANCE:		
Rice, cleaned or not, broken rice, and rice flour, of extra-European origin, imported from countries having commercial treaties with France		Frs. Cts.
	100 kilos.	1 80
Rice of European origin or imported directly from countries out of Europe:		
In the husk	„	3 00
Broken rice	„	6 00
Cleaned rice and rice flour	„	8 00
Rice of extra-European origin imported from European countries not having treaties with France:		
In the husk	„	6 60
Broken rice	„	9 60
Cleaned rice and rice flour	„	11 60
PORTUGAL:		Reis.
Rice	Kilog.	036

Tariff Classification in each Country.	Rates of Duty.	
SPAIN:		
Under Conventional tariff:		Pes. Cts.
Rice in the husk	100 kilos.	3 40
„ not in the husk	„	6 80
„ flour	„	9 15
Under General tariff:		
Rice in the husk	„	*4 00
„ not in the husk	„	*8 00
„ flour	„	10 00
ITALY:		Lire. Cts.
Rice in the husk	Ton	50 00
„ cleaned	„	110 00
„ flour	100 kilos.	2 80
AUSTRIA-HUNGARY:		Fls. Kr.
Rice in the husk or cleaned, and broken rice:		
Under Conventional tariff	100 kilos.	1 00
Under General tariff	„	2 00
Rice meal and flour	„	3 75
SWITZERLAND:		Frs. Cts.
Rice in the husk	100 kilos.	0 30
„ not in the husk	„	1 50
„ flour	„	2 00
GREECE:		Drs. Lep.
Rice	Oke	0 15
Rice flour	„	0 20
TURKEY:		
Rice and rice flour	8 % *ad val.*	
BULGARIA:		
Rice and rice flour	8 % *ad val.*	
ROUMANIA:		Lei. Ban.
Rice, under General tariff	100 kilos.	3 00
„ under Conventional tariff	„	2 50
Rice flour	Not specially tariffed.	
SERVIA:		Frs. Cts.
Rice, under General tariff	100 kilos.	4 00
„ under Conventional tariff	15 % *ad val.*	
Rice flour	Not specially tariffed.	
UNITED STATES:		Doll. Cts.
Rice, cleaned	Lb.	0 02
„ not cleaned	„	0 01½
„ Paddy	„	0 00¾
„ meal and rice flour; also broken rice which will pass through a No. 12 wire sieve	„	0 00¼
MEXICO:		Pes. Cts.
Rice	100 kilos.	5 10
„ flour	„	11 22
BRAZIL:		Reis.
Rice, in the husk or not, or crushed	Kilog.	030
„ flour	„	120
ARGENTINE REPUBLIC:		
Rice	15 % *ad val.*	
„ flour	25 % *ad val.*	
ECUADOR:		Suc. Cts.
Rice	Kilog.	0 01
„ flour	„	0 05

* *See* p. 142, from which it would appear that these duties have lately been increased.

Tariff Classification in each Country.	Rates of Duty.
PERU:	Soles. Cts.
Rice in the husk	25 % *ad val.*
„ shelled or broken	Kilog. 0 01½
„ ground	„ 0 02½
COLOMBIA, UNITED STATES OF:	Pes. Cts.
Rice	Kilog. 0 01
„ flour	„ 0 05
VENEZUELA:	Bol. Cts.
Rice, in grain	Kilog. 0 10
„ ground	„ 0 25
URUGUAY:	Cts.
Rice, in the husk	Kilog. 0 01 and 5 % *ad val.*
„ not in the husk	Kilog. 0 04 and 5 % *ad val.*
„ flour	36 % *ad val.*
BOLIVIA:	
Rice of all sorts	30 % *ad val.*
CHILE:	
Rice in grain	25 % *ad val.*
„ in powder	25 % *ad val.*
CUBA:	
Rice in the husk:	Pes. Mls.
If imported in Spanish vessels	100 kilos. 1 140
„ foreign „	„ 1 560
Do., cleaned:	
If imported in Spanish vessels	„ 2 340
„ foreign „	„ 3 180
Rice flour	Not separately tariffed.
PORTO RICO:	
Rice in the husk:	Pes. Cts.
If imported in Spanish vessels	100 kilos. 0 99
„ foreign „	„ 1 44
Do., cleaned:	
If imported in Spanish vessels	„ 1 98
„ foreign „	„ 2 87
Rice flour	Not separately tariffed.
MARTINIQUE:	Frs. Cts.
Rice in grain	100 kilos. 1 00
„ flour	Not separately tariffed.
GUADELOUPE:	Frs. Cts.
Rice in grain (consumption duty)	100 kilos. 0 75
„ (import duty)	„ 0 75
Rice flour	Not separately tariffed.
EGYPT	7·2 % *ad val.*
TUNIS	8 % *ad val.*
ZANZIBAR	5 % *ad val.*
ALGERIA	Same duties as in France, which see.
CONGO FREE STATE	Free.

VI.—CUSTOMS TARIFF OF NICARAGUA—*concluded.*

The following is a continuation of the statement published at pp. 23–32 of the *Board of Trade Journal* for January, showing the rates of import duty now levied under the Customs tariff of Nicaragua. This statement has been prepared by Mr. Marshall Vaughan, Her Majesty's Consul at Granada. The duty in each case is leviable per pound avoirdupois English weight, on the gross weight of the package, without any reduction whatever for cases or wrappers. When a package contains several distinct classes of goods, the weight of the packing is distributed proportionately over each kind.

Note.—Peso = 2*s.* 10*d.* (about).

Articles.	Rates of Duty per English Pound.
	Pes. Cts.
Masks of all kinds	0·15
Cigar cases, pocket books, purses, match boxes, card cases, and other similar articles not mounted in gold or silver	0·30
Articles of all kinds made of papier maché, painted, lacquered, varnished, or gilded	0·15
Cardboard, fine, for visiting cards, &c.	0·05
Do., ordinary coarse	0·02
Trucks, wheelbarrows, and carts	0·05
Hand bags for travelling	0·25
Carriages, coaches, berlins, &c.	0·10
India-rubber on cotton fabrics, manufactured as shoes, capes, boots, and other similar articles	0·25
Do., manufactured in any article not specially mentioned	0·40
Do., on woollen fabrics, such as capes, &c.	0·35
Do., do., silk do.	0·50
Brushes for cleaning floors, shoes, and animals	0·10
Do., teeth, nails, hair, clothes, and other similar uses	0·20
White wax, pure or mixed, not manufactured	0·15
Do., do., in candles	0·20
Do., do., manufactured in articles not specially mentioned	0·25
Horse hair, &c., raw	0·04
Beer	0·02
Patent leathers	0·45
Epaulettes, tassels, and cords of imitation gold and silver	1·50
Slipper and slipper forms	0·30
Saddle girths of all kinds	0·10
Children's carriages of all kinds	0·08
Glues of any kind	0·06
Colours of all kinds not specified, in powder, paste, or oil	0·04
Do., do., in tinctures	0·15
Manufactures of mother-of-pearl of all kinds not specially mentioned	0·50
Do., coral of all kinds	2·50
Do., do., mounted with gold or silver	5·00
Do., cork, for any use	0·10

Articles.	Rates of Duty per English Pound.
	Pes. Cts.
Cork, unmanufactured	0·02
Funeral wreaths and other similar ornaments	0·50
Boot uppers, lasting, plain, and without toe-pieces	0·40
Do., do., with do.	0·45
Do., do., fancy, patent leathered, goloshed	0·50
Do., of leather, or any other skin	0·40
Do., of patent leather	0·60
Do., of enamelled hide	0·40
Do., of silk	0·70
Work boxes, &c., for ladies	0·25
Crinolines and dress improvers	0·25
Glass, common, in sheets, plain and clear	0·02
Do. in sheets, ground, white, or coloured, plain or fancy	0·04
Do. manufactured in articles of any kind and for any use not specially mentioned	0·05
Frames for pictures or looking glasses, with or without glass	0·15
Paper collars and cuffs	0·10
Celluloid, do. do.	0·60
Beads of all kinds, imitation gold, pearl, coral, jet, &c., either of glass, porcelain, or any other similar material	0·30
Strings of all kinds for musical instruments	0·50
Horn in manufactures not specially named	0·30
Diamonds, unset	25·00
Do., mounted for cutting glass	0·50
Staves and hoops for barrels	0·01
Cotton elastic webbing for boots or garters	0·31
Woollen elastic webbing for boots or garters	0·45
Silk do. do.	0·67
Oiled and tarred canvas for packing	0·05
Brooms of all kinds made of vegetable fibres	0·03
Do. do. of bristles	0·10
Sculptures, statues, or figures of all kinds not specially mentioned	0·10
Emery, solid or in powder	0·03
Looking glasses of all kinds, with or without frames	0·10
Prints and oleographs on paper or cardboard, with or without frames	0·10
Do. do. on cloth, with or without frames	0·20
Matting, coir, and palm	0·02
Stereoscopes, camera obscura, dioramas, magic lanterns, and other similar apparatus	0·20
Dressing cases of every kind	0·25
Labels, plain or printed	0·08
Waistbands and belts of leather or any other hide for women's or men's use	0·30
Lanterns and lamps of glass, for streets and lighthouses	0·05
Do., of paper	0·02
Water filters of any kind	0·02
Artificial flowers and fruit of any kind, set, or in loose pieces	0·45
Flower stands of glass, chinaware, or imitation porcelain	0·05
Matches of all kinds	0·04
Photographs of any kind, with or without frame	0·25
Fireworks of any kind	0·15
Bellows of any kind	0·10
Percussion caps for firearms	0·20
Saddle trees	0·04
Galloons, fringes, braids of imitation gold and silver	1·50
Wash leathers	0·20
Caps of all kinds made of cloth	0·80
Cochineal	0·25
Grease of any kind, not specially mentioned	0·05
Gloves of any material, do.	0·80

Articles.	Rates of Duty per English Pound.
	Pes. Cts.
Gloves, of kid	1·20
Hydrometers	0·25
Lasts and wooden moulds of all kinds	0·01
Manufactures of bone of any kind not specially mentioned	0·30
Incense of any kind	0·15
Musical instruments with keyboard, such as pianos, harmoniums, organs, &c.	0·10
Do., with handle	0·20
Do., stringed, such as guitars, violins, &c.	0·15
Wind instruments, such as flutes, cornets, clarionets, &c.	0·20
Musical instruments, such as mouth-organs, accordions, jews harp, and other similar toys	0·10
Do., for bands, such as cymbals, drums, triangles, and other similar instruments	0·10
Soap, common	0·02
Do., superior toilet, perfumed	0·10
Rope, hemp, manilla, or sisal	0·04
Sets for chess, draughts, dominoes, roulette, lotto, and similar games	0·25
Children's toys of all kinds, with exception of those made of india-rubber	0·15
India rubber toys for children	0·30
Cane, for chairs, &c., rough or finished	0·08
Sealing wax, of any kind	0·15
Bricks, of any kind not specially mentioned	0·01
Lamps, of all kinds not specially mentioned	0·10
Pencils, or all kinds	0·15
Pencil cases and penholders, not of gold or silver	0·15
Gold and silver leaf, real or imitation, for gilding and silvering	1·00
Account books and manuscript books, blank	0·07
Sweet liquors, up to 12° Carthier	0·05
Strong liquors. (*See* special duty.)	
Common earthenware	0·02
Chinaware, imitation of porcelain, in articles of any kind not specified	0·04
Hops	0·03
Manufactures of wood, not specially mentioned	0·03
Timber	0·01
Ivory, in manufactures not specially mentioned	1·00
Marble, in powder	0·01
Measures, of leather or any other material, for the arts and trades, covered or not	0·20
Wooden and metal rules	0·10
Metronomes	0·13
Honey or treacle	0·03
Wooden mouldings, painted, enamelled, or gilt	0·15
Saddles of all kinds	0·20
Furniture, of wood, such as chairs, sofas, &c., with upholstering of every kind	0·05
Grindstones and hones for sharpening edge tools	0·03
Furniture, of wood, such as beds, wardrobes, dressing tables, drawers, tables, and any other similar pieces of furniture not otherwise specified	0·08
Spirit levels of all kinds	0·05
Wafers	0·15
Ochre and other earths, for paint	0·04
Tinsel	0·50
Paper, cardboard, &c. of common quality, for packing, waste paper, paper bags, &c.	0·02
Papers of all kinds not specified, including blotting paper	0·04
Wall paper and ornamental paper	0·12

Articles.	Rates of Duty per English Pound.
	Pes. Cts.
Paper and cardboard, enamelled, silver, or gilt	0·16
Emery and glass paper	0·05
Umbrellas and parasols, of cotton	0·15
Do., of wool	0·25
Do., of silk	0·50
Wooden rulers	0·10
Combs of horn and bone	0·30
Do., of rubber, gutta-percha, or celluloid	0·50
Do., of ivory or tortoiseshell	1·00
Do., of materials not specially mentioned	0·40
Perfumery of all kinds, such as oils, soaps, and powders	0·10
Parchment and its imitations	0·15
Pearls, real, not mounted	5·00
Venetian blinds	0·05
Gun flints	0·02
Hides, not manufactured or manufactured in articles not specially mentioned	0·30
Paint, of any kind not specified, in powder, paste, or oil	0·04
Pistol holsters of all kinds	0·20
Slates, with or without frames; also slate pencils	0·01
Porcelain slates, cardboard or glass, for writing upon with pencils	0·05
Quill pens for writing	0·20
Feathers and plumes for trimmings	0·80
Feather dusters	0·50
Gunpowder for mining purposes by special permission of Government only	0·40
Do. of other kinds	Prohibited.
Patent leather toe pieces for boots	0·60
Portraits in oleograph or crayon, with or without frame	0·25
Spoked wheels for trucks, wheelbarrows, and carts	0·05
Do., for coaches and carriages	0·10
Tallow, raw	0·02
Do. candles	0·05
Seals and stamps of any kind	0·20
Panama straw hats	1·50
Plain palm or straw hats, without trimming, for men, women, or children	0·40
Do. of felt, wool, plush, woollen velvet, or any other stuff, for men and boys	0·50
Trimmed hats or bonnets of felt, velvet, straw, palm, or any other material, for girls or women	0·60
Sole leather for shoes or other uses	0·15
Tobacco, unmanufactured	Prohibited.
Do., manufactured by special permission of Government only	0·60
Plug tobacco and snuff	0·40
Enamelled goatskins	0·20
Oil-cloth, American leather, or any other painted or enamelled fabric for tablecloths, flooring, &c.	0·10
Thermometers	0·25
Ink of all kinds for writing and marking	0·02
Hair oils and hair washes, and tonics	0·10
Fire crackers and Chinese rockets	0·05
Glass show-cases for displaying goods	0·08
Candles, sperm, paraffin, composition, or stearine	0·05
Velocipedes of any kind	0·10
Watch glasses	1·00
Wines of all kinds in bottles or otherwise	0·03
Do., sparkling, such as champagne, &c.	0·06
Plaster of Paris, solid or in powder	0·01
Do., manufactured in articles of all kinds not specified	0·03

Articles.	Rates of Duty per English Pound.
	Pes. Cts.
ARTICLES PAYING SPECIAL DUTY.	
Foreign spirits more than 12 degrees up to 25 degrees inclusive, Carthier, per bottle	0·40
Do., do., above 25 degrees Carthier, by special permission of Government only; in addition to above, duty for every degree in excess	0·03
Gunpowder for mines, by special permission of Government only	0·40
Tobacco, manufactured, by special permission of Government only	0·60
Plug tobacco and snuff	0·40
Foreign merchandise imported at Cape Gracias á Dios for the consumption of that district will pay 40 per cent. of the duty established in the present tariff, excepting the following articles, which will pay a special duty as follows:	
Foreign spirits more than 12 degrees up to 25 degrees Carthier, per bottle	0·40
Do., do., above 25 degrees Carthier, for every degree in excess	0·03
Gunpowder	0·30
Tobacco of any kind or form	0·40
The natural products and manufactures imported from any of the other Central American Republics will pay duty according to the respective treaties with such Republics, calculated on the value of the invoice.	

Articles free of duty :—

Fans of paper or cardboard with advertisements.
Manure for agricultural use.
Stills for distilling, by special permission of Government.
Metallic wire fencing, with or without barbs, posts, clips, and other accessories, the wire not being less than three lines in diameter.
Sledge hammers.
Animals, alive or dead.
Ploughs, harrows, and rakes, for agricultural purposes.
Asphalt.
Sorting and winnowing machines for coffee and other seeds.
Mercury for mines.
Drills for mining purposes.
Water pumps of metal of any kind.
Surveying and ships' compasses.
Lime and cement.
Iron tubing with cocks, keys, and corresponding plugs, &c.
Coal and animal charcoal.
Crucibles for melting metals.
Machines for hulling, grinding, and winnowing.
Dynamite for mines, by special permission of Government only.
Buildings and houses of wood or iron.
Vessels and boats of all kinds, rigged or not.
Passengers' personal luggage, excluding everything unused, or furniture, which must pay duty according to its class.
Geographical or astronomical globes.
Iron water tanks.
Forges.
Fountains and accessories, for parks, gardens, &c.
Ice.
Birds' eggs.
Printing presses with accessories.
Astronomical, physical, chemical, and hydraulic instruments, not otherwise specified.
Horticultural instruments.
Surgical and mathematical instruments.
Syringes for subcutaneous injections.
Printed books and printed matter.
India-rubber or leather water hose.
Maps and geographical charts of any kind.
Machinery of any kind, for agricultural purposes, arts, and trades, and parts of such machines.
Microscopes of all kinds.
Windmills.
Steam motors and horse or cattle powers.
Patterns of goods without saleable value.
Church organs.
Gold in ingots, bars, dust or coins.
Potatoes, grains, and other field products not specially mentioned.

Music paper and printed music.
Printing paper in sheets, not less than 29 ins. × 20 ins.
Lightning conductors.
Fodder for animals.
Fire bricks and tiles for smelting purposes.
Live plants of any kind.
Silver, in ingots, bars, or coins.
Hydraulic presses.
Tower clocks, including dials and gongs.
Seeds of all kinds.
Galvanised iron roofing, with ridging, gutters, screws, &c.
Telescopes.

Prohibited articles:—

Stills for distilling.
Alcohol.
Telegraphic and telephonic apparatus of all kinds.
Breech-loading fire-arms, such as rifles, by special permission of Government only.
Military arms, such as rifles, cannon, &c.
Bayonets.
Dynamite, only for mining purposes, with special permission of the Government.
Gun powder, do., do.
Tobacco, in leaf.
Tobacco manufactured, only by special permission of the Government.

VII.—EXTRACTS FROM DIPLOMATIC AND CONSULAR REPORTS.

British Trade with South American States.

Mr. J. G. Kennedy, Her Majesty's Minister at Santiago, in a despatch to the Foreign Office, dated the 6th December, with respect to the measures to be adopted for facilitating and increasing British trade with South American States, says:—

"Almost every mail from England brings me commercial newspapers, circulars, and letters from persons interested in commerce and manufactures, asking for advice as to the best means of advertising their wares, securing patent rights, trade marks, &c.

"I have endeavoured to place the interests of my correspondents in the hands of persons best qualified to comply with their wishes, but I venture to state that in the majority of the above cases the best plan would be to insert advertisements in the local newspapers.

"In connexion with the above subject I beg here to submit a few suggestions for facilitating and increasing British trade in Spanish America:—

1. The study of Spanish in commercial schools.
2. The adoption of the metric system of weights and measures.
3. The issue of illustrated catalogues in Spanish; prices may be quoted in sterling, but weights and measures must be according to the metric system.
4. The appointment by first-class London advertising firms of agents in each Republic.

"These agents would contract for space in all native newspapers, and should be prepared to receive as part payment and dispose of such goods as are advertised, otherwise the result of advertising would be *nil*.

"So far the British manufacturers have been content to advertise in Spanish and other advertising periodicals printed in London for the Spanish American market, which newspapers go direct to the dealer's waste-basket, whereas an advertisement appearing regularly in the native press is seen by the buying public.

5. Let each manufacturer issue a telegraphic code arranged for his own special line of goods.
6. Study the wants of each country, and manufacture special lines of goods suited to the market.

"The low rate of exchange and a high tariff in Chili cause a demand for low-priced articles. This demand is met by the Germans, who suit themselves to the market, and the British resident retailer, however well he may be disposed to encourage home manufacturers, is compelled to import German goods to meet the popular taste.

"Many first-class firms object to make and put their name on any but first-class goods; this gives a foreign imitator an opportunity of getting a high price for a worthless article.

"Take, for instance, Rogers' cutlery and Gillott's pens. Why should not both these firms, with their magnificent plant, turn out an article to compete with the imitations which flood the market?

"A high-class New York manufacturer gets over the difficulty by omitting his name on the second-rate article, and thus retains a connexion with this market which otherwise he would have lost.

7. More discrimination in freights.

"The following table shows that Germany and Belgium get the bulk of the printing paper trade, yet manufacturers' prices in the different countries are almost identical.

"The small item from the United States was an experiment which resulted in a dead loss, owing to the difference of freights.

"The German steamers from Hamburg often carry paper as ballast at nominal rates."

PRINTING PAPER IMPORTED IN 1888.

	Subject to 25 per cent. Duty.	Free for Newspapers.
	Kilos.	Kilos.
France	15,220	60,904
Great Britain	53,138	48,539
Germany	82,490	924,048
Belgium	3,774	118,865
Italy	14,327	13,118
United States	3,069	457
	172,018	1,165,931

THE STATE RAILWAYS OF SWEDEN.

Mr. H. Gough, Her Majesty's Secretary of Legation at Stockholm, writing in a recent report on the subject of the State railways of Sweden, says:—

In the course of the year 1889, 82 kilometres of fresh line were added to the Swedish Government railways, which, with this addition, reach a total length of 2,613 kilometres.

The Government property in railways, including those in course of construction, may be estimated at a value of 261,649,500 kröner (14,536,083*l.*).

The gross traffic receipts for the year 1889 amounted to 22,201,302 kröner (1,233,405*l.*), from which 14,645,166 kröner (813,620*l.*) must be deducted for working expenses. The debt incurred in the construction of railways, on which interest was

paid for the year 1889, amounted to the sum of 286,390,996 kröner (15,910,611*l.*): about 2,000,000 kröner of this amount, however, is sunk in lines which are still in course of construction. If this last-mentioned sum be compared with the net receipts for the year 1889, it will be found that they amount to 2·64 per cent. of the total capital.

The gross receipts are greater than the corresponding sum for the previous year by no less than 1,408,419 kröner (78,245*l.*). The average amount brought in per kilometre of railway is 449 kröner (25*l.*), or rather more than 5 per cent. higher than the average for the preceding year. The total expenditure amounted to 14,645,166 kröner (813,620*l.*), which is 829,317 kröner (46,073*l.*) more than the preceding year. The net profits amounted to 7,556,137 kröner (419,785*l.*), an increase of 579,102 kröner (32,172*l.*). The number of stations for traffic amounted at the end of the year 1889 to 266, not counting 87 stopping places and depôts for loading of lesser importance.

At the end of last year 90 private owners of lines worked in connexion with the State railways, of whom 68 were members of the union founded in 1882 for running these lines in combination with one another.

The rolling stock of the State railways consisted at the beginning of the year 1889 of 362 locomotives, 821 carriages for passengers, 63 prison and mail vans, 189 military baggage waggons, 8,603 goods trucks, and 2 waggons mounted with cranes.

During the year 11 locomotives, 12 passenger carriages, and 17 goods trucks were added to the already existing stock.

The entire number of passengers during the year 1889 amounted to 4,340,222, who travelled an average distance of 45 kilometres per person. The total receipts for passenger traffic were 7,196,790 kröner (399,822*l.*), which showed an increase of nearly 97,000 kröner (5,389*l.*) on the previous year. The total number of passengers showed an increase of 260,000 in round numbers.

Only 34,442 travelled in the first class, while in the second and third class carriages there were 681,526 and 3,549,034 respectively.

The receipts for goods traffic were slightly over 13,000,000 kröner (722,222*l.*)

Forty-five accidents took place, 22 persons being killed, and 23 badly injured; of the killed 12 were employés, but none were passengers. The whole number of employés at the end of 1889 was 5,087.—(*No.* 190, *Foreign Office Miscellaneous Series.*)

Telegraphic Charges in Germany.

In a despatch to the Foreign Office, dated the 17th January, Mr P. Le Poer Trench, Her Majesty's Chargé d'Affaires at Berlin, with respect to charges for telegrams in Germany, says:—

"An Imperial Ordinance, dated the 15th January, was published in yesterday's *Reichsanzeiger*, reducing the charge for ordinary telegrams for any distance within the Empire from 6 pfennigs (about 3 farthings) for each word with a minimum total charge of 60 pfennigs (about 7¼*d.*), to 5 pfennigs (about ½*d.*), a word with a minimum total charge of 50 pfennigs (about 6*d.*). The new tariff is to come into force on the 1st February."

Supply of Dried Fish at Dantzig.

Mr. H. T. Hunt, Her Majesty's Consul at Dantzig, writing on the subject of the demand for dried fish in Dantzig and district, says:—

Dried fish is imported in small quantities for the use of the shipping frequenting the port. The best dried codfish sold at Dantzig comes from Iceland *viâ* the Danish ports. Newfoundland fish is unknown on this market, although there must be a very good opening here for it, but no one in that trade seems to come this way. The large Roman Catholic population in this part of Germany and in Poland would gladly welcome the introduction of Newfoundland fish as an article of food if it was brought to their notice, and there is no reason why the trade in dried codfish should not equal that in salt herrings. To open a demand for it, travellers speaking German and Polish would have to be employed to visit the inland towns, and treat with the dealers who supply the peasantry with all they require. It would not be amiss if if these ambassadors of commerce, as they term themselves, were furnished with printed directions, in the two languages, showing how the dried fish should be prepared for the table, otherwise the people would be certain to eat it raw, as they do the herrings, and probably take a dislike to it, and cease purchasing it.—(*No.* 808, *Foreign Office Annual Series.*)

Life-Saving Stations in Denmark.

Mr. A. P. Inglis, Her Majesty's Consul at Copenhagen, writing on the operations of life-saving stations in Denmark, says:—

During the past summer, on the opening of the railway extension from Frederikshaven to the Skaw, His Majesty the King visited that part of the country and was afforded an opportunity of inspecting some of the life-saving stations on the dangerous coasts of North-West Jutland. Mr. Vice-Consul Andersen, of Lemvig, who is superintendent of the district, availed himself of the occasion to compile a very interesting statement, showing the number of strandings that have taken place during the 38 years from 1851 (when the service was first inaugurated) to March 31st, 1889, to have been 2,354, or an average of 62 annually. The

following table gives the nationality of the vessels, number of crews, and lives saved and lost :—

Nationality.	No. of Shipwrecks.	No. of Crews.	Lives Saved.	Lives Lost.	Per-centage.
British - -	380	3,994	3,722	272	6·81
Danish - -	446	2,393	2,280	113	4·72
Norwegian - -	373	2,417	2,311	106	4·39
Swedish - -	204	1,863	1,752	111	5·96
German - -	521	4,325	4,106	219	5·06
Dutch - - -	220	1,319	1,271	48	3·64
Russian - -	84	1,466	1,430	36	2·46
French - -	64	562	520	42	7·47
Other nationalities -	62	228	182	46	20·18
Total - -	2,354	18,567	17,574	993	—

The number of lives lost was thus 5·35 per cent. of the total number of the crews.

The salvage stations on the coast of Jutland now number 47, with 41 inspectors and 436 boatmen and attendants. The number of lives saved by these means up to July 1890 were:—By lifeboats, 2,566; by lifeboats and rocket apparatus, 68—2,634; by rocket apparatus alone, 2,361: total, 4,995.

During the operations of the lifeboats to the above-mentioned date, 11 boatmen and 12 shipwrecked mariners perished by the boats capsizing on four occasions. During exercise 10 lives were lost owing to similar casualties.

It may be mentioned that, when the boats go out for practice, it is customary to make use of oil to still the waves. During the year ended March 31st, 1890, it appears from an official report that 209 gallons were consumed during boat exercise, and 18 gallons in active salvage service.

The same report gives the number of strandings on the coasts of Denmark during that period as 65. Of these 26 were total losses, and 39 were eventually got off. Taking nationalities there were:—Danish, 18; Swedish, 16; German, 13; Norwegian, 4; British, 4; Russian, 4; Dutch, 3; French, 2; Not ascertained, 1: total, 65.

The number of ships' crews saved were as follows:—Saved themselves, 28; saved by private assistance, 20; part saved themselves, part saved by lifeboats, 1: part by private assistance, part by lifeboats, 3; by lifeboats or rocket apparatus only, 12; derelict, 1: total, 65.

The number of lives saved was 326, viz.:—By own efforts, 89; by private assistance, 113; by lifeboats (90) and by rocket apparatus (34), 124: total, 326.

In this connexion reference may be made to the very valuable wreck chart prepared in 1886 by Mr. J. L. Hohlenberg, at the request of the marine insurance companies of Copenhagen, showing at a glance the strandings on the coasts of Denmark from 1838 to 1885.]

On this chart the perilous west coast of Jutland appears bordered with a fringe of dots, beginning at the dangerous Horns reef to the south, and thickening as the entrance to the Limfjord is approached. About Hirtshalls light the dots are thickly clustered, this beacon being frequently mistaken for the Skaw light. Proceeding northward the dots are more sparsely scattered, until the extreme point of the peninsula is reached at the Skaw itself, and here they are densely crowded, the strandings within the period comprised numbering no less than 408. The point, it should be stated, is well lighted, being marked by a fine fixed light, and also by a light-vessel stationed at the end of the reef.

The record of life salvage on these dangerous coasts forms a signal tribute to the effectiveness of the service, and to the intrepidity of the brave men who are engaged in the work of rescue.—(*No.* 814, *Foreign Office Annual Series.*)

Competition of English Firms in the Egyptian Rice Trade.

Sir C. A. Cookson, Her Majesty's Consul-General at Alexandria, writing on the subject of English competition in the Egyptian rice trade, says :—

There are grave difficulties in the way of any attempt on the part of an English firm to compete in the rice trade of Egypt, of which the following are the most important :—

1. A large capital is absolutely necessary, as the whole stock of rice must be bought at the commencement of the season. In order to work a mill producing, for example, 70 tons a day, a capital of at least 20,000*l.* to 30,000*l.* would be required. It is a question whether such a capital might not be more advantageously invested elsewhere.

2. It is extremely doubtful whether it would be possible for Englishmen to compete successfully with the old-established native mill-owners, who have a large capital at their disposal, and are thoroughly acquainted with all the native modes of doing business. These persons, assisted by their families, work their mills at a small cost, and are contented with comparatively moderate profits.

3. The risk attendant upon all transactions between Europeans and natives of this country, and particularly in the rice trade, cannot be too strongly dwelt upon. The assistance of an experienced native would be absolutely indispensable, but such a person would require constant supervision on the part of a trustworthy Englishman, with experience of the East, who should combine the duties of manager and engineer in order to reduce working expenses as much as possible.

The three most indispensable requirements for an enterprise of this kind may therefore be briefly said to be :—

1. A large capital.

2. A most careful supervision over employés, and caution in dealing with the cultivators.
3. The greatest possible economy in working expenses to render competition with the native mill-owners possible.

A few years ago a large modern mill was established at Rosetta by a European firm. The result was decidedly discouraging, and after some losses the mill was closed. The promoter of the enterprise attributes its failure to the want of sufficient capital and the dishonesty of native managers, who were not under proper supervision. In view, however, of these broad facts, which I have stated above, I would recommend the greatest caution before embarking on an enterprise of this nature, and would suggest to any who may think of doing so the advisability of sending to Egypt a person possessing a technical knowledge of this industry who, after some residence on the spot, and an examination into the details of the trade, would be able to report decidedly as to the probability of a successful issue to such an undertaking. — (*No.* 189, *Foreign Office Miscellaneous Series.*)

Telegraphic Communication with Dutch Guiana.

Mr. W. Wyndham, Her Majesty's Consul at Cayenne and Surinam, in a report to the Foreign Office, dated the 20th December, states:—

"Yesterday the telegraph station at Paramaribo was opened for regular service, and for the first time this colony has been brought into telegraphic communication with Europe, *viâ* Martinique and the United States 'Key West.'

"The rules governing the despatch of messages are those laid down by the International Telegraph Convention of Berlin, dated 17th September 1885.

"Maximum length of a word for a single charge is ten letters, and for cyphers five."

Spanish Lighthouses.

Sir F. C. Ford, Her Majesty's Ambassador at Madrid, in a despatch to the Foreign Office, dated the 8th January, encloses translation of a note which he had received from the Duke of Tetuan, the Spanish Minister of State, on the subject of the improved light at Cape Villano and the light at Cape Tourinan. The following is an extract from this translation:—

"The Minister of Public Works informed me, on the 29th December last, that owing to the great difficulties connected with the site selected for the construction of the first class lighthouse with electric light on Cape Villano, and the material impossibility of pressing forward the work during the winter months, he has

been obliged to grant repeated delays to the contractor, and that consequently the work cannot be completed before the end of January 1892. The lighthouse of the fourth order on Cape Tourinan, has been finished for some time, but the chief engineer of the province of Corunna has intimated to the Director General of Public Works that it would be expedient to defer the inauguration of this light until the electric light is in working order at Cape Villano, so as to prevent any mistake arising between this light and the one of the fourth order now burning temporarily on Cape Villano."

Proposed Railway in the Island of Samos.

Mr. D. L. Marc, Her Majesty's Consul at Samos, in a report to the Foreign Office, dated the 26th December, says:—

"A number of English gentlemen under the direction of Mr. Provand, M.P., are entering into a contract with the Government of this island for the purpose of building and establishing a line of railroad about 50 kilometres long, and touching at all the chief centres of trade in this island. A survey is about to be commenced laying out the proposed line; it is agreed that the Government of Samos shall pay a subsidy to be determined on for a number of years as interest on capital invested, and grant the speculators certain concessions in mines."

VIII.—MISCELLANEOUS TRADE NOTICES.

BEET CROP OF RUSSIA.—The Russian *Journal du Ministère des Finances* states that the last crop of beet has been more abundant that that of the previous year. The area of the plantations has increased from 249,051 to 278,608 deciatines,* and the crop from 26,132,733 to 29,773,197 berkovets.† The plantations connected with sugar refineries have an area of 114,302 deciatines, whilst 164,306 deciatines form plantations belonging to private individuals. According to the different districts, the crop for 1890 is sub-divided as follows:—

South-West of Bessarabia (Volhynia, Kiew, and Podolia), 17,528,960 berkovets in 1890 against 14,256,977 berkovets in 1889.

Central (Voronège, Catherinoslaw, Koursk, Orel, Poltava, Samara, Tambow, Toula, Kharkow, and Tchernigow), 8,037,436 berkovets in 1890 against 8,446,429 berkovets in 1889.

Poland, 4,205,136 berkovets in 1890 against 3,429,311 berkovets in 1889.

Eastern Siberia, 1,665 berkovets in 1890 against 16 berkovets in 1889.

Total in 1890, 29,773,197 berkovets as compared with 26,132,733 in 1889.

With regard to quality, the last crop is very superior to the preceding one; on an average the per-centage of sugar this year is 16·92 against 15·96 in 1889.

EXPORTS OF CEREALS FROM RUSSIAN PORTS.—According to the *Economiste Russe* for the 27th January, the total quantity of cereals and farinaceous food substances exported from Russian ports in 1890 was 393,460,000 pouds.‡ The corresponding quantity for 1889 was 437,889,000 pouds. The principal ports of export are: Odessa with 85,302,000 pouds, Rostov with 46,394,000 pouds, Nicolaief with 36,553,000 pouds, Libau with 31,556,000 pouds, St. Petersburg (port) with 26,214,000 pouds, and Novorossisk with 25,846,000 pouds.

PROPOSED TRADE MARKS LEGISLATION IN RUSSIA.—The Russian *Nouveau Temps* is given to understand that a Bill dealing with trade marks is being prepared at the Ministry of Finance. Wilful falsification of these marks will be punished with a fine of from 500 to 2,000 roubles, or imprisonment for a period of from six months to two years.

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* Deciatine = 2·7 acres. † Berkovet = 360 lbs. avoirdupois.
‡ Poud = 36 lbs. avoirdupois.

RUSSIAN COASTING TRADE.—The *Nouveau Temps* observes that Russian Customs statistics relating to foreign and transit trade, as well as to foreign navigation and coasting trade, are making satisfactory progress, as is seen from the annual volumes of the trade of Russia on the European and Asiatic frontiers, and of which that for 1889 has just appeared.

According to the Customs reports, Russian coasting vessels in 1889 (those of the Caspian Sea excepted) carried about 149 million pouds of different goods. The quantities for the different seas are as follows:—Black Sea and Sea of Azov, 125,698,000 pouds, Baltic Sea, 21,138,000 pouds, and White Sea, 2,121,000 pouds. As regards the description of merchandise carried, the total given above is sub-divided as under:—57,770,000 pouds of cereals, 11,860,000 of common salt, 11,149,000 of coal, 7,974,000 of fire-wood, 5,040,000 of naphtha product, 2,763,000 of cement, 2,768,000 of metallurgical products, 2,483,000 of fish, 2,040,000 of iron, and 1,175,000 of bricks and tiles.

The coasting trade is thus only of relative importance on the Black Sea, Sea of Azov, and the Caspian Sea. Comparing the extent of the coasts with the population, it appears of little importance. The coasting trade of the White Sea is insignificant, which is explained by the fact that the shores of this sea are sparsely populated, but that of the Baltic is much larger. This state of things arises from the fact that the Customs tariff is so arranged that the factories on the coast use in preference foreign materials and not those of the country itself. A light duty on alabaster has had the effect of bringing about a large increase in the coasting trade of Finland.

The division of merchandise differs according to the economic conditions of the littoral of each sea. Thus on the Black Sea there is carried more rye flour than wood, fish, and common salt; in the Baltic the first place belongs to wood, then follow cement, articles of iron, salt, bricks, rye flour, foreign coal, barley and corn.

On the Black Sea cereals are mostly carried—wheat, rye, barley, and maize. The coasting voyages are not long, however, extending on the one side from the ports of the Dneiper, Bug, and Dniester, to Odessa; and on the other side from the ports of the Sea of Azov to Kertch. The second place belongs to the common Crimean salt; then come wood, Russian coal, petroleum, metal wares, cement, iron, wheaten flour, &c. In 1889 there were shipped 10,726,000 pouds of coal from Donetz. It cannot be doubted that this quantity will not be long in doubling or even trebling. Already now, chiefly since the growth of the new port of Marioupol, a marked development has been noted in the construction of steam coasting vessels and, in general, freights, very high hitherto, show a tendency to fall.

The degree of importance of the different ports as regards coasting trade is as follows, both imports and exports being taken together. Odessa occupies the first place, its trade movement being 88 million pouds. The second place comes to Kherson

with 50 million pouds; then come Batoum and Rostov (12 millions); Kertch (11 millions); St. Petersburg, Akkerman, and Riga (9 millions); Poti (7½ millions); Sevastopol, (6 millions); Eupatorea (5½ millions); Marioupol and Novorossisk (5 millions each); Reval and Berdiansk (4 millions each); Libau (3½ millons); Yalta, Theodosia, Temrak, Yeisk, and Otchakou (2½ millions each); Pernau and Arkbangel (1½ millions each.)

Tea Growing in Transcaucasia.—The Russian *Nouvelles*, in the course of an article on the subject of tea-growing in Transcaucasia says, that there is one district of Russia, namely, Transcaucasia, which can compete in the future, if only for home consumption, with India and China. It recommends that specialists should be sent to Assam to study the method of culture of the tea-plant, this culture being most developed in that province.

In fact, the tea-plant flourishes on the western littoral of Transcaucasia, notably at Soukhoum. Already, in 1883, this question had been discussed at a meeting of the Rural Economic Society of Transcaucasia. The tea shrubs planted in those districts reach normal dimensions and arrive at full maturity, producing excellent seeds. That is because the climate of Western Caucasia compares favourably with that of the south-east of China. This analogy consists not only in the equality of the mean annual temperature of the two regions, but also in the quantity of rain which falls there and in the period (spring) when the rains are most abundant, a condition essential for the growth of the tea-plant.

In 1884 the Department of Agriculture consulted the Rural Economic Society of Transcaucasia on the part which it would take in the introduction of tea plantations in Transcaucasia whilst recommending it to introduce Chinese immigrants for the commencement of this culture and to instruct the native workmen in the industry. According to the *Nouvelle Revue* the Department in 1885 entrusted Dr. Piassetsky, a well-known traveller, with a commission to bring with him from China two Chinese overseers for the production of tea, but this desire of the Department has not yet been realised.

It is seven years ago that the introduction of the culture of the tea-shrub was spoken of, but nothing has as yet been done. Nevertheless some unscrupulous persons have been exhibiting at the Nijni-Novgorod fair a so-called Caucasian tea, which was nothing else but the *Vaccinium Acrostophylos*, a kind of tea from Koporié, the sale of which is the object of judicial prosecutions, and which only serves to discredit the future plantations in Caucasia.

THE FRENCH EXHIBITION AT MOSCOW.—The *Journal de St. Pétersbourg* for the 25th December (6th January) publishes the following particulars of the forthcoming French exhibition at Moscow :—

The exhibition will be divided into nine groups. The first will be devoted to the fine arts, painting, sculpture, architecture, &c. The second will consist of seven sections, including scholastic and teaching material, typographic material, paper ware, card-making, musical instruments, medicine, veterinary art, &c. The third group will be devoted to household effects, art and ordinary furniture, stuffs for furniture and wall-papers, crystals, porcelains, bronzes, stoves and fuel, lighting material (with the exception of electric lighting), perfumery, toilet articles. In the fourth group will be found stuffs, wearing apparel, boots and shoes, hunting articles, jewellery, &c. The fifth group will represent metallurgy and the mining industry, leathers, india-rubber goods, parchments, strings for musical instruments, chemistry, &c. The sixth group will be that for machinery and electricity. In the seventh group will be united the products of farm industry. The eighth will be given up to agriculture, the ninth to horticulture.

THE GERMAN CHEMICAL TRADE.—The French Consul-General at Frankfort, in a report on the industry of chemical products of Germany in 1889, published in the *Moniteur Officiel du Commerce* for the 8th January, says :—

The following figures relating to German chemical products during the year 1889 have only just appeared.

The improvement which has been manifest in the course of 1889 is due, not so much to the high sale prices of the articles manufactured, as to a large increase in production, for which markets, particularly in Germany itself, have not been wanting.

In a large number of cases, it is true, higher prices have been agreed upon, but almost all the profits derived from them by the manufacturer serve to meet increases in wages and prices of raw materials (coals, &c.).

The number of factories of chemical products existing in Germany has passed in 1889 from 4,464 to 4,809, and that of workmen regularly employed from 84,315 to 90,585, or an increase for the latter of 7·44 per cent. The days of labour in the chemical works have increased to 27,379,200, against 25,100,024 in 1888, and the wages paid, which in 1888 were 82,055,016 francs, amounted in 1889 to a total of 89,513,812 francs. The average annual wages, which in 1887 were 946·25 francs, and, in 1888, 966·25 francs, increased in 1889 to 978·75 francs.

The import of raw materials required for chemical industries increased by 147,000 tons; *per contra*, the export of these materials has decreased by 29,000 tons, so that the excess of the import

of raw materials, compared to the exports, has increased in 1889 by 176,000 tons, worth 16,110,000 francs. As regards the import and export of manufactured articles, entries show a diminution of 3,181 tons, but the exports also have decreased by 5,292 tons, so that the excess of the exports over the imports varies to the extent of 2,111 tons compared with 1888. However, the value of the exports was 14,250,000 francs greater than that of 1888, the average value of the merchandise exported having risen from 635 to 701 francs per ton, from which it appears on the one hand that the prices of chemical products have increased by about 10 per cent. in 1889, and on the other, that the over-production of 1889 has not found a market abroad, but that on the contrary it has been absorbed by native consumption.

The 85 factories of chemical products, which in 1889 were worked by companies, possess a total capital of 235,254,500 francs, and they distributed, in 1889, 24,902,610 francs in dividends, an average of 10·58 per cent. In comparing this result with those of preceding years, it appears that the yields up to 1885 had a retrograde movement, increasing gradually afterwards until 1889, without, however, reaching the figure of 1882. The following are the dividends in question:—1882, 12·82; 1883, 10·02; 1884, 7·96; 1885, 6·37; 1886, 7·17; 1887, 8·92; 1888, 9·78; and 1889, 10·58 per cent.

Of the above-mentioned 85 companies, 24 have yielded no dividend, or 28·23 per cent. of the whole.

Four have paid a maximum dividend of 2½ per cent., or 4·71 of all the companies.

Seven, or 8·25 per cent. of all the companies, have paid a maximum dividend of from 2½ to 5 per cent.

Eight, or 9·41 per cent., have paid a maximum dividend of from 5 to 7½ per cent.

Twenty-two, or 25·88 per cent., have paid a maximum dividend of from 7½ to 10 per cent.

Thirteen, or 15·29 per cent., have paid a dividend of from 10 to 15 per cent.

Seven, or 8·24 per cent., have paid a dividend of more than 15 per cent. Among the latter was a company called the "Farbwerke" of Hochst, near Frankfort, which in 1889 declared a dividend of 22 per cent., due to some extent to the large sale of antipyrine, of which this company had the monopoly.

STATISTICS OF JOINT STOCK COMPANIES IN GERMANY.—According to the *Œkonomist* of Berlin, 236 joint stock companies, with a total capital of over 13 millions sterling, were established in 1890, against 360 companies with 20 millions in 1889. There now exist 3,259 companies with a total capital of 346 millions which is an approximate figure.

The companies founded in the last three years have been distributed as follows :—

Nature of Enterprises.	1890.		1889.		1888.	
	No.	Capital.	No.	Capital.	No.	Capital.
		£		£		£
Mines, blast-furnaces, salt works - -	9	1,640,000	13	3,265,900	6	1,011,800
Metallurgy, machines -	17	2,750,000	30	2,118,250	18	900,100
Chemical and lighting products - -	8	2,196,000	15	746,500	4	65,000
Textiles - - -	14	1,164,000	10	1,177,600	7	408,100
Breweries - -	20	422,500	30	1,174,850	41	1,404,350
Miscellaneous - -	8	278,550	10	507,650	3	72,250
Banks - - -	31	1,342,250	69	3,081,400	8	1,536,700
	236	13,549,500	360	20,127,200	184	9,684,250

The decrease of 1890 on 1889 is very marked.

Shipping Trade of Antwerp in 1890.—According to the *Moniteur des Intérets Matériels*, there arrived at Antwerp, in 1890, 4,550 vessels, of which 3,872 were steamers and 678 sailing vessels, having a total tonnage of 4,493,043 tons. The tonnage of these vessels was made up of 4,232,437 tons for steamers and 260,606 tons for sailing vessels.

In 1889, the number of ships was 4,379, of which 3,608 were steamers and 771 sailing vessels, with a total tonnage of 4,050,706 tons for the steamers and 293,991 tons for sailing vessels.

Comparing these two years, it appears that there entered in 1890, at Antwerp, 171 vessels more than in 1889. The number of steamers has increased by 264, and that of sailing vessels has diminished by 93. The tonnage for 1890 is higher by 442,337 tons than that of 1889. Similarly the tonnage of steamers has increased by 475,722 tons and that of sailing vessels has diminished by 33,385 tons.

The Foreign Trade of France in 1890.—According to the *Economiste Français* for the 24th January, the imports into France for home consumption amounted from the 1st January to the 31st December 1890 to 176,930,000*l.* and the exports of domestic produce to 148,804,000*l.*

These figures are distributed as follows :—

Imports.	1890.	1889.
	£	£
Articles of food - - - -	58,830,000	56,884,000
Raw materials - - -	88,908,000	87,752,000
Manufactured articles - - -	24,120,000	22,681,000
Other articles - - -	5,072,000	5,353,000
Total - - -	176,930,000	172,670,000

Exports.	1890.	1889.
	£	£
Articles of food - - - -	33,300,000	32,853,000
Raw materials - - -	30,249,000	32,875,000
Manufactured articles - - -	76,618,000	73,905,000
Other articles - - -	8,637,000	8,525,000
Total - - -	148,804,000	148,158,000

THE MINES OF HUELVA.—The United States Consular Agent at Huelva, in a report upon the mines in that province, says :—

The great copper zone which traverses the province of Huelva extends from Castilla de las Guardas, 40 kilometres west-north-west of Seville, to Ajustel, in Portugal, a distance of more than 200 kilometres, with an average width of 25 kilometres.

In this zone, among others less important, are found the mines of Rio Tinto, Tharsis, La Zarza, Sotiel-Coronada, Lagumza, Peña de Hierro, La Joya, Poderosa, &c., all having great analogy in their ores, which are found in great masses and at little distance from the surface, at which point they generally terminate in immense crests of oxide of iron.

The amount of copper in these ores is very variable, but the great proportion may be taken at 2 to 3 per cent., a poverty of metal which is only compensated by the abundance of ore and the method of extraction and treatment.

This great metalliferous zone, which occupies about 2,000 square kilometres, is tapped to the port of Huelva by three lines of railway—the Rio Tinto railway, the Tharsis, and the Bintron to San Juan del Puerto. The two last are also open to public service. In the more westerly part of the province another railway, elevated for half its length, carries ore to the River Guadiana.

The general characteristics of the ore are :—Sulphur, 50 to 51 per cent.; iron, 40 to 41 per cent.; silicate, 4 to 5 per cent.; copper, 1 to 3 per cent., with variable insignificant quantities of gold, arsenic, silver, antimony, and other metals. The so-called rich ore, with 2 to 3 per cent. of copper, is exported, and the poor, of about 12 per cent., is treated by open air calcination. The amount shipped is about 700,000 tons yearly.

The mines of this province were worked by the Phœnicians and the Romans, neglected by the Moors, and nearly so by the Spaniards until the middle of the last century, when the attention of the Government was seriously directed towards them. But the immense deposits only began to yield a fair part of their treasures when, 25 years ago, foreign companies bought up the great mines and began to develop them. In 1866–67 the number of steamers which loaded ore in this port was 38, with 11,514 tons, while in

1889–90 the number was 727, with 520,494 tons. In 1866 the Custom house collected 315,000 pesetas, and in 1886 about 4,000,000 pesetas.

The capital invested by the different mining companies is 254,560,288 pesetas. They pay in taxes to the public treasury 1,749,624 pesetas annually; in wages, 20,763,125 pesetas; and buy stores in this country for about 8,250,000 pesetas yearly. The number of men employed is from 17,000 to 18,000.

Besides the copper mines, there are a great many small workings of manganese, of which about 8,000 tons were shipped in 1889–90. The principal mines are near Valverde del Camino. Near Aracena ore containing antimony and silver is worked to a small extent and sent down to Seville.

There is gold in the quartz rocks and streams, but it has not been found in any workable quantity.

CONDITION OF MINERS IN HUNGARY.—The total number of workmen in the mines of Hungary is 35,533, of whom 29,831 are adult men, 5,000 boys from 12 to 16 years, and some hundred women. They earn less in the metal than in the coal mines, because the first, situated in populous districts, find labour more easily. In the metal mines, the daily average wage of the adults employed permanently is 1*s.* 4*d.* to 1*s.* 6*d.* Sometimes, according to the supply of labour, it increases to 2*s.*, and sometimes also, but more rarely, it falls to 5¾*d.* In the coal mines the same wage is from 2*s.* to 2*s.* 6*d.*

In the metal mines, says the *Economiste Français*, work is not generally carried on by night. When that is the case, the 24 hours are divided into three shifts of eight hours each: the first from 4 a.m. to noon, the second from noon to 8 p.m., the third from 8 p.m. to 4 a.m. In some mines recently opened the working day is 12 hours, from 6 a.m. to 6 p.m., with an hour, and sometimes two hours', interval. In other mines another system operates: that of the week of 48 working hours. The work in these commences on Monday at noon, and the workmen labour for 48 hours, with six hours of consecutive labour and six hours of rest. In other mines, finally, there are two shifts, one from 6 a.m. to 2 p.m., the other from 2 p.m. to 10 p.m.

In the coal mines work is generally carried on night and day. There are more often two shifts, one from 6 a.m. to 6 p.m., the other from 6 p.m. to 6 a.m., with one or two hours' rest.

The miners have amongst them very old mutual aid societies, but the statutes of these have been modified and adapted to present necessities.

In the less important mines, the tools, lights, and explosives are supplied gratis to the miners; in the others, tools are also supplied to them, but a small sum is retained from them for maintenance and wear and tear. As regards light and explosives, they are sold to them at cost price; that is to encourage economy.

The miners are generally housed by the companies, who have erected workmen's dwellings. The annual rent for the smallest is 1*l.* The workmen keep themselves. They buy provisions at the co-operative societies (very rare) and in the common market. Some companies supply victuals to their workmen at cost price. Other metal mines distribute to them gratis, when working, a small piece of salted pork (which is supposed to be an antidote against poisoning by arsenic).

Strikes are infrequent; when they do occur, as in 1875, 1880, and 1887, it is generally foreign workmen who have promoted them. As a rule they last but a short time.

Exhibition of Oriental Carpets at Vienna.—The organ of the commercial museum at Vienna announces that an exhibition of Oriental carpets will be opened within the precincts of the museum from the 1st April to the 15th June 1891.

Demands for admission were to be received after the 10th January, and articles must be sent between the 10th and 20th March next. There will be a section for modern carpets. An illustrated catalogue and a large descriptive illustrated work will be published in connexion with this exhibition.

Exhibition at Prague.—A general exhibition of the kingdom of Bohemia will be opened at Prague in 1891, in order to celebrate the centenary of the first continental exhibition, which was held in that town in 1791. The *Journal de la Chambre de Commerce de Constantinople* says that this exhibition is essentially national. However, the executive committee has stated that Class 27 of this exhibition will form an international section reserved to apparatus intended to prevent accidents in workshops and factories and to invention patents of all countries. The exhibition will open towards the middle of May and will remain open until the 1st October. It is now too late to forward applications for admission.

Mining Industry in Greece.—In a report to the State Department at Washington on the subject of the future of the mining industry in Greece, the United States Consul at Athens says:—

Mining and metallurgy in Greece are at a great disadvantage in certain respects, but with some countervailing advantages. In the first place, the developed mineral area is small and its wealth far from intact. Yet there seem to be sufficient ores still left at Laurium to guarantee the continuance of a moderately profitable industry for many years to come, if only capital, enterprise, and skill unite in utilising the best methods of mining and metallurgy. This the leading companies seem determined to have done, as the

great improvements now projected or in progress bear witness. Their aim is to establish works and introduce processes which shall make Laurium the centre of metallurgical operations for the Levant, even after the exhaustion of its own mines. To this end they possess and are acquiring important mining properties in Macedonia and Asia Minor.

A further disadvantage, and most serious, is the total absence of coal in Greece. Lignite, indeed, is found at Oropus and elsewhere, and is laid down at Laurium for 19 drachmas per ton for the French company's furnaces; but Laurium had to import from England last year additional fuel to the value of nearly 500,000 dols., viz., 18,351 tons of coal, 33,195 tons of coke, and 3,989 tons of patent fuel. While the facilities for ore-dressing are exceptionally good, both from the lay of the land and the vicinity of the sea, smelting must remain a comparatively expensive process until cheap fuel is obtained or a substitute found.

On the other hand, there are distinct advantages as regards transportation and labour. With railway connexion inland and the best of harbours immediately at hand, transportation facilities are abundant. The Greeks are historically a seafaring people, and they now have a long lead in the carrying trade of their own country, and are second only to the English in that of the Levant at large.

Labour, too, is cheap and docile. At first it was difficult to obtain native labour sufficiently skilled, and nearly all the work was done by Italians. Now, however, the Hellenic company boasts that it employs Greeks almost exclusively, even in its more responsible positions. These Greek miners, on 50 to 60 cents a day, not only live but save money; and the social arrangements of the companies seem to be humane and wise, guaranteeing the care and comfort of the men in case of sickness or other disability incurred in their service. The modern labour question has not yet struck Laurium, the last strike on record being probably that of the 20,000 slaves who flocked to Deceleia during the Spartan occupation in the closing period of the Peloponnesian war. The free Greek now probably costs less, all things considered, than the slave who delved in these mines in the age of Pericles, besides being a less uncertain quantity.

Octroi Duties in Servia.—The Servian *Official Gazette* for the 22nd December (old style) publishes the regulations and the tariff of octroi duties which will be levied on articles imported into the Servian capital. Goods in transit and, within a period of six months, those which are warehoused at Belgrade, will be exempt from this duty.

The *Sirpske Novine* for the 23rd December publishes the tariff of octroi duties for Nisch. It is expected that these octroi duties will realise a sum of from 20,000*l.* to 24,000*l.*

COMMERCIAL MUSEUM AT CONSTANTINOPLE.—The *Journal de la Chambre de Commerce de Constantinople* for the 10th January contains a notification to the effect that an Ottoman commercial museum is about to be established at Constantinople.

THE PROJECTED RAILWAY FROM KOWLOON TO CANTON.—His Excellency the Viceroy of Canton has approved the scheme for making a railway between Hong Kong and Canton, and, according to the *London and China Telegraph*, it now only needs the confirmation of the Peking authorities, to whose favourable consideration his Excellency has strongly recommended it, the Commission his Excellency has appointed to inquire into the feasibility of the proposed line having reported that as altered by them there will be no interference with graves, private property, or public works; that it will be a great benefit to the country through which it runs, and that the people generally will welcome its introduction. Its Hong Kong terminus is to be at Sam-shui Pu, near the Cosmopolitan Dock; thence it is to be carried to Shin-chun, Pu-kek, and Shih-lung, passing through T'ang-tau-hia and Chang-ping. From Shih-lung or Shekloong it crosses the river at Niu Shek-tong, goes on through the Liang family's village, Tang-ha, Tung-chung-tau, and Shik-tze'aa, where it again crosses the river to Ta-tun-tsan and Sinkai; passing to the back of Sintang, it comes out on the river and enters the Pwanyu district at Nankang, then passing back to the Polo Temple and the Niushan Batteries, it comes out at the Wuyoung market town and is carried across the Sze-pei-ti to the south-east corner of the city of Canton, having its terminus at the Tientsin Matow, the newly constructed official wharf. Its length will be 380 li in all or about 127 miles.

The railway is to be constructed under the same conditions as the Kaiping and Tientsin line, foreigners being excluded from holding shares.

SILK MANUFACTURE IN JAPAN.—The United States Consul at Hiogo says, with respect to silk manufacture in Japan, that until very recently the hand-loom of the most primitive pattern has been entirely in use in Japan in the manufacture of silk goods. At Kyoto two large factories have just been completed, where the most improved foreign machinery is employed. One of these factories is for reeling silk alone; the other for dyeing, weaving, and finishing. The latter has been erected at a cost of 500,000 yen, and was lately visited by the Emperor and Empress. A large number of the operatives in this factory are women and girls receiving from 10 to 20 cents per day wages, while the most skilled of the male operatives receive less than 50 cents per day working 12 hours.

With a moist climate during the greater part of the year, and therefore adapted to silk weaving, with an abundance of cheap

labour and a soil unsurpassed for the growth of the mulberry, Japan is destined to become one of the greatest of the silk-producing countries of the world.

GOLD MINING IN THE MALAY PENINSULA.—On September 17th, 1890, says the United States Consul at Singapore, the first gold arrived in Singapore that has ever been mined with satisfactory results on the Malay peninsula by European miners. The exact amount turned over by the superintendent, Mr. Bibby, to officers of the Raub Australian Syndicate here was 867 ounces, 9 pennyweights, 12 grains, worth, in round figures, when reduced to American currency, 14,000 dollars. The assays so far show an average of about 48 dollars to the ton.

"The Malay peninsula and that part of it situated in the province of Pahang, this consular district, has been prospected for years by European and Chinese companies, and numerous attempts have been made to ascertain the exact status of the gold belt, but without any definite result. A year ago the present company was organised, and commenced work at Raub, about 175 miles north of Singapore. The site of the workings was a deep water hole, and around all were dense jungles, where no European had ever done a single day's work. During the past year a ten-stamp mill and engines have been conveyed from Singapore up several hundred miles of tortuous and obstructed river routes; houses, roads, and tramways built; a shaft has been sunk to the depth of 80 feet; galleries have been driven, and at the first hasty crushing, after 25 days of work, nearly 14,000 dollars worth of fine milling gold has been extracted.

"Of course the showing so far does not prove implicitly to an American miner that the mine will be remunerative, yet all the ground indications are good. The country formation is a soft shale and granite. The vein is of good width, and has been prospected for some distance. The only drawback is the amount of water that has to be pumped from the mine; but on the other hand, labour is never over 60 cents per day, and wood and timber are ready at hand.

"The trouble with profitable workings of mines hitherto has been the extremely high-priced English management. With an American company and American management, such as we have in the United States, I see no reason why the Malay peninsula should not pay big returns for capital invested. The first assay of nearly 50 dollars to the ton is certainly good when we reflect that in the Black Hills gold is smelted as low as 5 dollars to the ton.

"This city and the whole of the Straits Settlements are excited over the gold find, and I have often heard the leading men of the colony wish for some experienced American miners to more thoroughly open up the country. A few months more of work will undoubtedly develop the country to such an extent as to leave no doubt as to the real resources of the section."

PROPOSED COMMERCIAL ROUTE IN NORTHERN PERSIA.—The following is an extract from a despatch by the Belgian Minister at Teheran, dated the 10th December last:—

The Imperial Bank of Persia is in negotiation with the Government for the concession of a trade route between Teheran-Tauris-Djoulfa (Russian frontier), Tauris-Bagazid (Turkish frontier), and Tauris-Buroujird towards the south to rejoin the Mohammera route at Teheran.

The concession is granted for 60 years, the company erects at its own expense the caravanserails and the bridges; it establishes a regular transport service by waggons and carriages for goods and travellers. The State concedes, on the lands which belong to it, an area of 10,000 square metres around each station. The company has the right to construct irrigation works along the route and to let the irrigated lands to Persian subjects exclusively. The concessionnaire has also the right of navigation on Lake Urmiah and can establish two steam tugs there. As the route is free from tolls, the concessionnaire reserves to himself the right of toll on the bridges constructed by him. This duty will be fixed in concert with the Government.

The concessionnaire has the privilege of appealing to foreign capitalists to aid him in his enterprise; he may cede his concession, but the cession must be approved by the Persian Government.

The route must be finished within five years after the signing of the contract.

The concessionnaire will pay to the Persian Government, at the end of each year, a sum of 5 per cent. on the net profits realised. The Government on its side will not impose any tax on the cultivated lands attached to the concession, nor on the buildings; further, the machinery and materials necessary for working will enter free of duties.

The concessionnaire will charge at half the usual rate for the conveyance of Imperial mails.

The trade route will have a total length of 997 miles, made up as follows:—Teheran to Kazvin, 90 miles; Kazvin to Tauris, 265 miles; Tabriz (Tauris) to Julpa, 75 miles; Tabriz (Tauris) to the Turkish frontier, 166 miles; Tauris to Hamadan, 330 miles; Hamadan to Buroujird, 71 miles.

The bridges and other works to be executed are not numerous; the cost of construction will therefore be low. It is estimated that it will vary between 16*l.* and 20*l.* per mile.

According to estimates, the expenses, including the purchase of rolling stock, two steam tug-boats and horses, will amount to 95,000*l.* The gross annual revenue is estimated at 78,500*l.*, from which the expenses, given at 50,000*l.*, should be deducted, leaving an annual profit of 28,500*l.* to remunerate the capital expended of 95,000*l.* Five per cent. must be deducted as the share of the State in the profits.

CONSUMPTION OF DISTILLED SPIRITS IN THE ARTS, MANUFACTURES, AND MEDICINE IN THE UNITED STATES.— A report on the quantity of distilled spirits consumed in the arts, manufactures, and medicine in the United States during the year ended December 31st, 1889, prepared by Mr. Henry Bower and Mr. Henry Pemberton, jun., special agents, under the direction of Mr. Frank R. Williams, expert special agent in charge of manufactures under the American census, has just been issued by Mr. Robert P. Porter, Superintendent of Census. The following information is taken from this report:—

A number of estimates have been made by various persons as to the quantity of distilled spirits consumed annually in the arts, manufactures, and medicine. These estimates have been founded upon two bases: First, the quantity of alcohol only consumed in the arts, manufactures, and medicine in the United States; and, second, the quantity of distilled spirits of all kinds so consumed.

It is necessary at the outset clearly to understand this distinction in considering the work which has been done in this direction in the past.

Concerning the amount of alcohol alone so consumed, Mr. Windom, Secretary of the Treasury, in his annual report of December 4th, 1889, estimated the amount at about 6,000,000 proof gallons.

Mr. F. Miller, Commissioner of Internal Revenue, estimated, on December 6th, 1887, that 5,900,000 proof gallons of alcohol are consumed in this manner.

Mr. Green B. Raum, Commissioner of Internal Revenue, included in his report for the fiscal year ending June 30th, 1882, a statement of the quantity of alcohol only used in the arts and manufactures, prepared from statements of collectors of the Internal Revenue Department. According to this investigation 4,269,978 proof gallons of alcohol were so used in the United States during the year ending April 1st, 1882.

From the foregoing it will appear that the estimate respecting the quantity of alcohol so consumed ranges from about 4,000,000 to 6,000,000 proof gallons.

The head of a firm in New York city dealing in alcohol, writing to the chief of the Bureau of Statistics, March 1st, 1887, estimates that less than 6,000,000 proof gallons of distilled spirits are used annually in the arts, manufactures, and medicine.

A manufacturer of chemicals in Brooklyn in 1887 estimated the quantity of spirits so consumed at 14,000,000 proof gallons.

As the total quantity of distilled spirits consumed in the United States in 1888 was 75,845,352 proof gallons, the estimate of 15 to 20 per cent., reduced to ordinary gallons, represents a consumption for the arts and manufactures of from 11,000,000 to 15,000,000 proof gallons.

As a conclusion from the foregoing, it is noted that the estimated quantity of alcohol consumed in the arts varies from 4,000,000 to 6,000,000 proof gallons, and of distilled spirits of all kinds from less than 6,000,000 to 15,000,000 proof gallons.

CALIFORNIA'S VINE PRODUCTS.—The vine-growers of California report an increasing demand for their products, and except, perhaps, in the matter of raisins, no likelihood of an excessive supply. For the makers of wine this, in the opinion of *Bradstreet's*, is a pleasing change from the state of affairs for the past four or five years. The extensive planting of wine-grapes in the first half of the decade led to such an increased production that the last half was a period of depression. The same thing had happened once before—in the early part of the previous decade—but Californians think these ups and downs will hereafter be less marked, basing their hope of a steady business for some time to come on the facts that their wines are steadily gaining favour in the East, their brandies are becoming an important factor in the liquor trade, and their sun-dried grapes are beginning to find a market in the wine-making parts of Europe. At the same time no wine-grape vineyards to speak of have been planted since 1888: the "Anaheim disease" has cleared out between 10,000 and 12,000 acres of vines in Southern California, and in Napa and Sonoma counties many vineyards have succumbed to the phylloxera. Thus, as no new wine vineyards can come into bearing for at least four years, the relations of demand and supply bid fair for a while, at least, to be more cheerful for the producer.

These unfavourable conditions of the past few years, however, have not materially affected California's position as a grape-growing State. She still presents statistics of viticulture so enormous as hardly to be comprehended. It is believed that there are not less than 150,000 acres of vines in the State, and it is estimated that 60 per cent., if not more, are of the finer grades. California still has the largest vineyard in the world, that of Senator Leland Stanford, covering 3,825 acres and containing a little over 3,000,000 vines. The vintage of 1890, as near as it is possible now to tell, amounted to 17,500,000 gallons, in addition to which about 1,000,000 galls. of brandy will be made, and as it takes 5,000,000 galls. of wine to make that amount of brandy, the total wine harvest would be 22,500,000 galls. It may be said that this was a trifling product compared with that of France, which was fully 25 times as large, but it must be remembered that France has been making wine for centuries upon centuries, but California has been making a business of it for only a comparatively few years.

Another branch of California's grape industry, that of raisin growing, exhibits still more surprising statistics. Here is a development truly wonderful, from 6,000 boxes of 20 pounds each, in 1873, to 1,400,000 boxes, as it is estimated, in 1890. Within 20 years this one State has come to furnish nearly half of the total American consumption of raisins. The planting of raisin-grape varieties of vines still goes on, and there is much apprehension of a speedy over-production. When the 80,000 acres of raisin-grape vines now in the State are in full bearing they will have an output of nearly 10,000,000 boxes, which is three times as many as the country now consumes. As the

increase in the consumption of this article has been little, if any, greater than the increase in population, though the price has fallen greatly, it is not probable that further increase of supply and consequent decrease of price will, as is the case with most articles of food, increase materially the demand. Hence, unless the present profit of California raisin growers are capable of great reduction before the balance turns, their future is not so promising.

If, however, the increase of raisin culture in California should not result in still lower prices, the country may yet be thankful for what she has already done. Not many years ago the trade received 8 dollars and even 10 dollars a box for the best Malagas, while now Californian competition has brought them down to less than 4 dols. on the average, prices for the best having run the past year not much higher at any time than 4·75 dols. or 5 dols. Those from California are now selling in the East for 2 dols. to 2·25 dols. a box of 20 pounds (the foreign raisins come in 22-pound boxes), and very fair bag raisins are bringing only 8 cents a pound. At first the California product was inferior in quality, but it gradually improved as the growers learned the art of raisin making, till, for the last three years, they have been so good that many people prefer them to the Malagas, and grocers predict that it will not be long before Malagas must sell here for a great deal less money than now or not sell at all.

The distilling of wine into brandy has, in the past two years, reached proportions big enough to make this one of California's important grape products. Two things have helped to accomplish this—the ravages of phylloxera in French vineyards and the low prices at which the distillers could buy wine in California. At the same time the passage of the Sweet Wine Bill enabled much sweet wine to be made, resulting in a big demand for brandy. That which sold in 1889 at 35 cents to 37½ cents was eagerly sought last season at 45 to 50 cents. It is hoped to produce finer grades and extend the market still more.

THE ANTHRACITE COAL REGIONS OF PENNSYLVANIA.—The following particulars respecting anthracite coal mining in Pennsylvania are extracted from a census bulletin prepared by Mr. J. J. Jones, special agent under the American census in charge of coal, under the supervision of Dr. David T. Day of the United States Geological Survey, special agent in charge of the division of mines and mining.

The anthracite coal-fields of Pennsylvania are situated in the eastern part of the State, and extend about equal distances north and south of a line drawn through the middle of the State from east to west, in the counties of Carbon, Columbia, Dauphin, Lackawanna, Luzerne, Northumberland, Schuylkill, Sullivan, and Susquehanna, and known under three general divisions, viz.:

Wyoming, Lehigh, and Schuylkill regions. Geologically they are divided into five well-defined fields or basins, which are again subdivided, for convenience of identification, into districts.

The total production of anthracite coal in Pennsylvania during the calendar year 1889 was 40,665,152 tons of 2,240 pounds (equal to 45,544,970 tons of 2,000 pounds), valued at the mines at 65,718,165 dols., or an average of $1{\cdot}61\frac{6}{10}$ dol. per long ton, including all sizes sent to market. In the above 35,816,876 tons is included unsaleable sizes temporarily stocked at convenient points near the mines and tonnage loaded into cars but not passed over railroad scales, as well as waste in rehandling in the various processes of cleaning the smaller sizes. The quantity reported by the transportation companies as actually carried to market, which is the usual basis for statistics of shipments, was 35,407,710 tons during the year 1889; 1,329,580 tons were used by employés and sold to local trade in the vicinity of the mines, and 3,518,696 tons were reported as consumed for steam and heating purposes in and about the mines. The item of colliery consumption, however, is somewhat indefinite, the coal being taken either from the current mining or from screenings and used where needed, often without preparation, and rarely included in the accounts of the operator, being reported to the census office in most instances as "approximated." For these reasons it has been excluded from the basis of valuation of the product at the mines.

The average number of days worked during the year 1889 by all collieries was 194. The suspension of mining during periods aggregating about one-third of the year was caused mainly by the inability of the market to absorb a larger product. The number of persons employed during the year, including superintendents, engineers, and clerical force, was 125,229. The total amount paid in wages to all classes during the year was 39,152,124 dols. The total number of regular establishments or breakers equipped for the preparation and shipment of coal was 342, 19 of which were idle during the year. Besides these there were 49 small diggings and washeries, supplying local trade. There were also 18 new establishments in course of construction.

The statistics of anthracite coal in Pennsylvania compiled for the tenth census were based upon the year ending 30th June 1880, and thus covered the last six months of 1879 and the first six months of 1880. The present census covers the calendar year 1889. The following items from the previous census are herewith given to show the developments which a decade has made in this industry:—

Tenth census statistics of anthracite coal, total production for census year, including all coal shipped to market and sold to employés and local trade about the mines, exclusive of culm (long tons), 25,575,875, equal to (short tons), 28,640,819; value of product at mines, 42,172,942 dols.; average price of all grades per long ton at mines, 1·68 dols.; total shipments for census year

(long tons), 24,566,822: total shipments for calendar year 1879, 26,142,689; total shipments for calendar year 1880, 23,437,242; total number of collieries, 275; total amount of wages paid in the tenth census year, 22,664,055 dols.; total number of employés, all grades, 70,669.

The largest actual shipment during any year in the history of the trade was made in 1888, being 38,145,178 tons of 2,240 pounds. The largest actual shipment for any one month was 4,187,527 tons, in October 1888.

The initial lines of transportation from the anthracite coal-fields are operated by the following companies:—Delaware, Lackawanna, and Western Railroad Company, New York, Susquehanna and Western Railroad Company, New York, Ontario, and Western Railroad Company, Delaware and Hudson Canal Company, Erie and Wyoming Valley Railroad Company, Central Railroad Company of New Jersey, Lehigh Valley Railroad Company, Pennsylvania Railroad Company, Philadelphia and Reading Railroad Company, New York, Lake Erie, and Western Railroad Company.

Losses by Fire in America.—The Toronto *Monetary Times* for the 9th January says:—

Comparison shows that the losses by fire in the United States and Canada for the year 1890 amounted to 106,998,345 dols., as compared with 131,949,000 dols. in the year 1889, a gratifying showing in favour of last year.

The aggregate loss last year was smaller than for a long while, that for 1888 having amounted to 123,000,000 dols.; for 1887 to 129,000,000 dols., and for 1886 to 116,600,000 dols.

Further Tin Discoveries in Texas.—The St. Louis *Age of Steel* says that:—

"Specimens of the new tin discoveries recently made in Texas have been received at San Antonio. The ores were taken there to be sampled. The mineral has been found in workable quantities on the Colorado river, in Llano county, 100 miles north-west of San Antonio, south of the Ballinger iron hill. The specimens are cassertile, and the deposit covers a large extent. It lays near the iron fields, and was passed by unrecognised by the miners. Professor Comstock, Assistant State Geologist, recently made the discovery of the ores and their value. New discoveries are being made daily, and sixty deposits have already been discovered."

Establishment of New Railways in Mexico.—The Belgian Minister at Mexico, in a recent report on the establishment of new lines of railway in Mexico, says:—Several capitalists have just applied for the concession for a railway which will assume

very considerable importance. This new line will go from Apizaco Flaxcala, will traverse the districts of Chignahuapam, Zacatlan, and Huachinango, and will end on the Atlantic coast at Tuxpan, Barro de Casones, or Tecolutla.

From Apizaco to Tlaxco the construction of the line will not present great difficulties, whilst the zone comprised between these two points is horizontal, and consequently this line will easily serve the districts of Almatepec, Piedras Negras, Guaxamalacan, Socaque, Acaltepec, Zacapexco, Totoluca, Tecomolucan, Las Teteles, Capula, Mitta, Toltecopa, Zolostoc, Payuca, Acapinalco, Coapexco, and Santa Clara.

From Tlaxco to Chignahuapam it will follow a plain and touch at Zacatlan, and thence, at Huachinango, without having serious difficulties to overcome nor large expenses to meet, but from this point, as far as the gulf, the expenses will be very considerable, Huachinango being situated in the heart of a very steep sierra.

The line, however, will be so important that the expenses of construction will be largely compensated by the receipts furnished by the haciendas and the important centres of population which it will pass through.

At Apizaco, the new railway will be connected with the whole Mexican system. All the products supplied by the different zones of Mexico, such as pulque, cotton, sugar cane, sarsaparilla, yuca, tobacco, veneering and building wood, are met with in the districts served by the new line.

It is also very probable that the question of the construction of a railway from Mexico to Cuernavaca will shortly be under consideration. M. Butman is the representative of American capitalists who propose to construct this line, the concession for which has been given to M. Hurn.

M. Butman is of opinion that this route has a grand future open to it; it will start from Mexico, will pass by Cuernavaca, and will end at Palizada, on the Pacific Ocean. It will take the name of the Southern and Pacific Railway.

On the central railway line the construction of a new branch going from Tula to Pachuca has been commenced. It will have a length of 73 kilometres.

M. José Arce has also obtained the concession for a railway which, going from Puebla, will traverse the district of Huajuapam Oaxaca; it will have its terminus at a point situated on the river Maroma or Rio Verde. This railway will take the name of Carbonifero de Oaxaca; it will serve a vast coal region, of which the principal deposits are the property of the concessionnaire.

Business Opportunities in Tuxpan.—The United States Consul at Tuxpan, writing with regard to the business opportunities of that place, says:—

Trade and commerce appear to have revived considerably during the quarter ending September 30th, 1890. The exports

from here to the United States have exceeded any of the previous quarters, and have surpassed those of the foregoing one by 112,688·32 dollars. Imports have also increased, but the exact amount cannot be correctly ascertained. In a business point of view appearances are much more encouraging.

Many letters have been received at this Consulate requesting the purchase and shipment of articles, and in many cases the purchase-price for said articles has been limited, but not a cent advanced for purchase of same, thereby seemingly expecting the resident merchant to expend his own money and ship said articles at his own risk to the western merchant, to be sold for what it might bring. Merchants here decline such propositions and reply that, if business transactions are requested, American merchants must appoint their agents here and advance the money necessary to procure said articles at the prevailing price, as there is no credit system, but cash on delivery; and for all business transactions a commission will be charged on all amounts of money expended for purchase and expenses on same.

Some representatives of mercantile houses came here expecting to do business their own way and corner the vanilla and chicle market with a few thousand dollars, but, when informed of the large sums of money expended every week and of the difficulty of procuring the articles without a proper agent who could speak the language and was accustomed to the business, they left without accomplishing anything.

Others again wish to know if a banking business of 50,000 dollars capital could do anything, and what class of vaults would be necessary to secure their money. On being informed that an iron safe was sufficient, or they could do as the Mexicans used to do, dig a hole in the ground and cover it up, and that 50,000 dollars could be spent any day in the week, especially on Sunday, which was the principal business day, they appeared much astonished and disappointed.

The truth is that they all are incorrectly informed as to the manners and customs of the country. Money deposited in any of the principal houses here is as safe as anywhere else, and if business is to be transacted they must appoint an agent in whom they place confidence, and also furnish the means to make the purchases.

Mexicans are just as sharp in trade as any other merchants, and with proper confidence between the parties, business can be largely extended.

A banking house established with sufficient means and properly managed would be an accommodation to the merchants and community generally.

AGRICULTURAL AND SUGAR BOUNTIES IN BRAZIL.—The United States Consul at Bahia, in a recent report upon agricultural and sugar bounties in Brazil, says:—

Three classes of sugar premiums are offered under the terms of a decree promulgated by the Brazilian Government, the first, of 50,000 milreis, to the sugar factory that will obtain, with the least expense in manufacturing, at least 12 per cent., without distinction of quality; the second, of 30,000 milreis, to the factory that under the same conditions as the first, will obtain at least 11 per cent. of sugar; the third premium of 15,000 milreis, uuder the same conditions as the two first, that will obtain at least 10 per cent. of sugar. These premiums will be distributed annually, upon information of, and inspection by, the Commission appointed by the Government. This Commission will receive instructions from the Minister of Agriculture, Commerce, and Public Works. The Commission will consist of three members, all of whom must be thoroughly conversant, in theory and practice, with the method of growing cane, and who shall frequently examine all the factories, note the cost of production, and suggest the best basis on which to proceed in the greatest development of the industry.

From a recent issue of the *Journal de Noticias*, of Bahia, it appears that in Brazil there are 80 factories with a capital of 58,650,000 milreis. Of those in the State of Bahia there are but four large factories and five small ones, the large ones having a capital of 70,000*l.* to 75,000*l.* each, on which 6 per cent. interest is guaranteed by the General Government. So far, however, none of the Bahia factories employ the diffusion process in manufacturing. Though a large quantity of sugar from an equal amount of cane may be obtained by this process, the expense of the manufacture is said to be greater on account of the greater expense of fuel.

Another decree of the Government, dated October 11th, relates to premiums offered by the Government for promoting and developing the agricultural interests of the country. This important decree provides that under a commission appointed by the Government, premiums varying in value from 50 to 10,000 milreis shall be given, under certain conditions, to farmers engaged in different branches of agriculture; in cattle and sheep and hog raising, also goats and horses; in producing the best quality of coffee, sugar, cocoa, grain, vegetables, cotton, wax, oil, rubber—in fact any article of produce that can be grown in the country. Under the terms of the decree there must be annually an agricultural exhibit in each State of all the products grown in that State, when the premiums offered will be awarded to those who are entitled to them. It is practically nothing more or less than a State fair supported by inducements held out by the General Government.

WHEAT-GROWING IN RIO GRANDE DO SUL.—The following information respecting wheat-growing in Rio Grande do Sul is taken from the last report of the United States Consul in that Brazilian province;—

The state of Rio Grande do Sul has an area of at least 118,000 square miles, but, as agriculture receives so little attention, grazing being the chief industry, it is impossible to ascertain within a reasonable degree of accuracy how much of the country is arable, and what part is under cultivation.

The northern half of the State is wooded, but the southern part is an undulating, treeless plain, with slight occasional ranges of hills extending east and west, but one of which has sufficient elevation to be termed mountainous, the highest point in the State in the northern part being 720 metres above the level of the sea. From observations made in the southern part of the State, it has been judged that a very large portion of it could be put under cultivation, and the soil has all the appearances of good quality. The geological formation of the untimbered section, or at least the greater part of it, is granite; there is no lime known and but little sandstone has been seen. But as no geological surveys of this section have been made, it is impossible to acquire much information on this subject.

Agriculture is followed chiefly by Italian and German immigrants who have arrived in this part of Brazil within the past few years, the greater part of whom have been located by the Government on public lands in parts of the country remote from rail or river transportation. Out of a population of 1,000,000 in this State, not 100,000 derive a living directly from agriculture.

It is the opinion, however, of those who have observed the tendency of the industry of the country, that within a few years the cultivation of wheat and other grain will be very much increased, for the reason that the low price now ruling for cattle and animal products will oblige the people to produce something else, in order to meet the food demand, which, naturally, is annually increasing. Some difficulty lies in the way of agricultural development because there is a disposition to hold land in large tracts, some tracts embracing as much as 200 square miles; these are exceptional, however, the greater number being much less. But little of these good lands is for sale to those who want small tracts for farming purposes.

As far back as 1805, and up to 1820, wheat was produced in this part of Brazil for export, but the area under cultivation cannot be ascertained.

Wheat-farming was abandoned, practically, for cattle-breeding about 1820 because of rust destroying two or three crops in succession. Since the introduction of German and Italian immigration into this State, some wheat has been grown in the colonies, especially the Italian colonies of Caxias, Donna Isabel, Conde d'Eu, and Silveira Martins, which are situated north-west of Port Alegre at various distances, one as remote as 75 miles, and at least 40 miles from railroad or navigable river. These colonies produced, in 1884, 5,639,300 kilogrammes of wheat, and they

produce enough to-day to supply the natural increase of demand for bread among them, which contain a population of from 75,000 to 100,000. Their great distance from markets and the fact that there is but one mill in the entire State which makes flour for the local trade, prevents the development of wheat-farming. In the first years of their experiments with wheat on freshly-cleared lands the yields were very great (varieties sown being Neapolitan and Lombard), but afterwards diminished, which led to the belief that, when there were no more clearable lands, wheat could not be grown; but there is little doubt that the application of the rules of good farming would maintain profitable yields of grain. Wheat-farming is certain to increase, and, so soon as good mills are provided, enough at least will be produced to supply the local markets. Native-grown wheat can scarcely be said to be in the market. It is not possible to quote prices, but the only flour mill of the State, at Pelotas, grinding 100 bushels per day, imports wheat from the United States and the Argentine Republic, some of which costs 1·25 dollars per bushel.

At the present time a very great portion of the arable part of the State is remote from rail or river transportation—some parts at least 200 miles, but the greater part from three to five days' journey with loaded carts over a country practically without roads.

EXPORT TRADE OF CHILI.—The Chilian correspondent of the *Economiste Français*, writing in January last, gives the following *résumé* of the export trade of Chili during the years 1888 and 1889 :—

The value of the exports from Chili amounted in 1889 to 65,963,100 dols., or 7,126,835 less than the year 1888.

Competition has effected this diminution. The mining industry has suffered a diminution of 6,754,841 piastres, and agriculture has fallen off to the extent of 1,302,885 piastres.

Specie and re-exports show on the contrary increases respectively of 493,142 dols. and 488,173 dols.

The following table shows the changes which have been produced in the different classifications of the exports during the two years 1888 and 1889 :—

Classification.	1888.	1889.	Differences.
Mining products	62,206,930	56,452,089	− 6,754,841
Agricultural products	8,784,363	7,841,478	− 1,302,885
Articles manufactured	48,812	52,966	+ 4,154
Miscellaneous articles	110,031	55,453	− 54,578
Specie	300,875	794,017	+ 493,142
Re-exports	638,924	1,127,097	+ 488,173
Total	73,089,935	65,963,100	− 7,126,835

Decrease for the year 1889.—Native products suffered a very considerable falling off in metal in bars, which was exported in 1888 to the value of 13,878,439 dols., whilst in 1889 this exportation only reached a value of 5,689,329 piastres.

Exports of saltpetre exceeded the preceding year by 3,621,214 piastres. Noteworthy decreases are those in barley and wheat. The former decreased by 1,633,514 piastres, and the latter by 537,278 piastres.

Immigration into the Argentine Republic and Uruguay.—The United States Consul at Monte Video, writing with regard to immigration into the Argentine Republic and Uruguay, says:—

"During the year 1889 there arrived in the Argentine Republic nearly 300,000 immigrants. There arrived in the first six months of 1890, 83,282, against 139,788 in a like period in 1889, a diminution in the flow of 56,506 immigrants, or at the rate of over 100,000 for the whole year. According to these figures the immigration has diminished one-third as compared with 1889; besides a large emigration must be added. In the last six months, January to June 1890, this has amounted to 37,498 persons, against 20,864 for the same period of 1889, an excess of 16,634 persons. From all this we gather that, while immigration has fallen off one-third as compared with the first six months of 1889, emigration, on the other hand, has increased over one-half. Until June the figures nearly balance, the excess of those coming over those going having fallen away to the insignificant figure of 629.

"The statistics of Uruguay present a decidedly different aspect In 1886 the balance in favour of immigration was 460; 1888, 15,872; 1889, 25,494, an excess of 60 per cent. over 1888; first three months of 1890, 5,849, as against 1,361 for same period the year before. These figures are for immigration from beyond the sea, and would be considerably augmented by the arrivals from the Argentine Republic, for at one time an exodus to Uruguay and Southern Brazil from the Argentine Republic was threatened. The character of this immigration may be seen from the following classification, according to nationality, of the new-comers in 1889: Italians, 15,047; Spaniards, 4,747; French, 1,091; Brazilians, 631; Germans, 319; English, 314; Austrians, 378.

"The Italians, as ever, are in so great a preponderance as to suggest a vision of days not far remote when these River Plate countries shall become Italian commonwealths. According to a paper recently published by the Italian Geographical Society of Rome, the bulk of the agricultural immigrants go to the provinces of Santa Fé and Buenos Ayres in the Argentine Republic; São Paulo and Rio Grande do Sul, Brazil; and California, in our own country. The same authority remarks that in all these countries they earn more than at home—three or four-fold in the United

States, Australia, double in the Argentine Republic and Uruguay, and something less than double in Paraguay and Central America. It is further stated that the countries which offer the most favourable conditions to Italian emigration are the Argentine Republic, Uruguay, certain provinces of Brazil, and the United States. Peru and Paraguay should, I think, be included in this list, certainly the latter.

"The River Plate countries have seen no days so dark as these since 1880, the year when the new order began, and it is probable that during the remaining months of 1890 there will be an almost entire cessation of the flow of immigration. We may expect this lull to be temporary, and when the shaking down has ended in general liquidation, the stream of immigration must turn this way again to find the comfort and abundance denied at home."

COTTON-GROWING IN PARAGUAY.—Writing on the subject of cotton-growing in Paraguay, the United States Consul at Monte Video says:—

"In the light, fertile, red soil of Paraguay the cotton plant grows spontaneously, and I have the opinion of men who, on account of long experience as planters in our Southern States ought to know whereof they speak, that the cotton of Paraguay compares favourably with the lowland, sea-island cotton of the Carolinas, its long silky fibre closely resembling that of this celebrated variety. Three varieties are cultivated in Paraguay, the *Gossypium herbaceum*, the *Gossypium vitifolium*, and the *Gossypium arboreum*. There is another variety still, that gives a brownish silk, which is directly employed in weaving and in making the poncho; it is called the *Guarani nandypta* (red cotton). In all these varieties the threads are more or less white, and belong to the class of very long wool. Du Gratz, writing in 1860, said that the cotton of Paraguay is a splendid product, and that the very long and fine fibre resembles the cotton of Brazil of the best quality. At this moment its cultivation has fallen to a pitiable figure. According to the statistics of 1886, there were but 15½ hectares of cotton against 10,000 hectares in 1863. The great discrepancy is due to the fact that before the war the country was compelled to produce sufficient for its own consumption, while to-day, with open ports and vastly better means of communication, the introduction of the foreign manufactured article has killed the home industry. To immigration is reserved the task of restoring cotton to its proper place at home, and, if practicable, to make it a leading article of export. In 1887 the total production of the world amounted to 9,510,000 bales. Brazil has considerably increased her production, and yet the market demand is strong. Paraguay should become a producer of this staple for export."

RAILWAY EXTENSION IN URUGUAY.—The Buenos Ayres *Standard* for the 26th November, respecting railway development in Uruguay, has the following :—

It is but a few weeks since the line from Toledo to San Ramon, the first portion of the eastern extension towards Nico-Perez, was handed over to public traffic. Then came the completion of the important connecting link between Paysandu and Salto, on the Midland Company. And now we have to congratulate our old friend, Mr. Robert Crawford, of Buenos Ayres Great Southern and Transandine memory, on the opening of the first 65 kilometres of his line, which took place on the 23rd November.

The railway in question starts from the Paso de los Toros, on the Rio Negro, the northern terminus of the Central Uruguay Railway, and stretches northward to the southern boundary of Brazil, which it reaches at the twin towns of Rivera and Santa Ana.

On its way it passes through the important town of San Fructuoso, better know by its original name of Tacuarembo, and traverses, for the greater portion of its length of 180 miles or 288 kilometres, a country the surface of which is in many places very broken and rugged, and intersected by numerous and deep streams.

The principal of these are the Tacuarembo Grande, and Chico, Très Cruces, Laureles, Rubio Chico, Canitas, Cardoso, Tala, Tambores, Trancheras, Guayabos and Cuñapiru.

Besides the bridges over these rivers, there are numerous smaller ones, and a tunnel through the ridge of hills known as the "Cuchilla de Tres Cruces;" to which must be added many deep cuttings in solid rock, requiring the use of much powder and dynamite to blast them out.

Altogether the works are of unusual difficulty for these countries.

From the original prospectus of the company it appears that Mr. Crawford undertook, for the sum of 513,333*l.* sterling in shares and debenture stock, to construct the railway, equip it with rolling stock, and furnish 73,333*l.* in cash to form a working capital for the railway when it was opened, besides paying interest during the construction of the line on the capital called up.

The surveys were begun in January 1889, and the works in the following August.

Besides the completion of the first section of the line, which we announce to day, the ballasting of the next 50 kilometres is rapidly progressing, and it is expected this second will be ready to be opened before long.

Some 155 kilometres of rails are laid altogether; while the earthworks are finished for about 240 kilometres, and the building of the bridges is also far advanced.

A large number of men and eight locomotives are employed upon the works. At Rio Negro station the ground is covered with the materials for construction, and activity prevails on all sides.

COTTON ADULTERATION IN INDIA.—The Indian *Rast Goftar* says:—

It seems that the Liverpool buyers have good grounds for complaint. Cotton adulteration is going on to an increasing extent from year to year, and the nature of the adulteration is getting gradually more scientific, and, therefore, much worse. The commencement was made with mere false packing of bales; then were introduced machines called "openers," by which inferior cotton might be more thoroughly mixed up together; and now sellers have come to mix inferior cotton seed before ginning. Buyers must be protected from fraud where they cannot well protect themselves, and Government have now a precedent afforded by the Merchandise Marks Act, which has legalised the principle of protecting the interests of buyers. In facing the growing evil of cotton adulteration, we must not be guided by any theory as to liberty of trade and the necessity of letting it go on free and unhampered. Some law must be made by which the adulteration may be stopped and the persons infringing its provisions may be punished. There is no reason why the mixing of cotton or cotton seeds should not be made liable to an adequate penalty. Wilful packing should be considered a penal offence, and provisions may be made to trace the adulteration of cotton to the offender by issuing, as recommended, licences to the presses, ordering the affixing of press-marks upon the bales, and restricting the free importation of unginned cotton into any cotton-growing district.

INDIAN EMIGRATION.—In a report transmitted to the Board of Trade from the India Office, there occur the following remarks with regard to emigration from India:—

The number of emigrants from India during the 10 years, 1880–81 to 1889–90, amounted to 131,796, making on an average an annual exodus of 13,180 persons. The proportion to the population is inappreciable, amounting to only about 0·52 per mille. And it cannot be said that many, even of this very small number, quit the country with the intention of permanently establishing their domicile elsewhere. Most of them in fact leave with the hope of returning with their savings to their homes in a few years. The hope is realised by one out of every two emigrants; for the number of persons who returned during the last 10 years amounted to only 72,084—an average of 7,208 yearly, or a little more than one-half of the number who left India. The mortality amongst these people is high in some of the colonies to which they go, and of those who survive a substantial proportion elect to continue to work as free labourers n the colony after their term of indenture expires, and many of these never return to India. In Mauritius, for instance, there is now a considerable population of Indian settlers, and in Trinidad, too, the settled Indians are increasing in numbers.

There are five places in India from which emigration may legally be carried on—Calcutta, Bombay, Madras, and the two French settlements of Pondicherry and Karikal. From Bombay emigration was stopped many years ago, and, though the legal restriction has been removed, recruiting has never been resumed, labour in the Western Presidency being, on the whole, so well paid, that there is but little inducement to emigrate to the coolie-employing colonies. The port of Calcutta is the most convenient for the shipment of emigrants drawn from the impoverished masses of the thickly-populated provinces of Oudh and Behar, and the main stream of the emigration flows down the Hooghly. Of the 16,874 persons who emigrated from India in 1889–90, no less than 11,671 were shipped from Calcutta, of whom almost the whole number was from the North-Western Provinces, Oudh, and Behar. From Madras 5,203 were shipped, from Pondicherry and Karikal there was no emigration during the year.

The destinations of the emigrants in the last two years were as follows:—

	1888–89.	1889–90.
	Persons.	Persons.
To Mauritius	604	4,544
„ Natal	1,585	4,124
„ Demerara	3,572	3,426
„ Trinidad	2,270	2,897
„ Dutch Guiana	1,092	1,300
„ Fiji	675	583
„ French West India Colonies	590	—
Total	10,388	16,874

PRODUCTION OF MINERALS IN INDIA IN 1889.—The following statement of the production of minerals in India in 1889 has been communicated by the India Office to the Board of Trade:—

Coal, 2,045,359 tons, value 6,898,420 rupees; salt, 1,028,813 tons, value Rs. 6,405,760; iron ores, 39,492 tons, value Rs. 116,450; quarry stones, 146,959,054 tons, value Rs. 5,484,640; gold, 81,426 ounces, value Rs. 4,430,610; gem stones, 1,244,732,375 carats, value Rs. 286,010; and miscellaneous minerals, 248,707 cwt., value Rs. 564,630.

COCOA IN BENGAL.—The Allahabad *Pioneer Mail* for the 4th December has the following note:—

The cultivation of the cocoa plant, and the manufacture therefrom of the tried drug known as hydrochlorate of cocaine, is to be tried as an experiment at the Government cinchona plantations in

Bengal. The suggestion that it might be advisable to attempt the manufacture of this valuable and costly drug in this country came some months ago from the authorities at the India Office.

CARDAMOM SMUGGLING IN TRAVANCORE.—The following is an extract from the *Times of India* for the 27th December last:—

The Government of the Maharajah of Travancore has been exercised of late with devising means to check the smuggling of cardamoms from that State into British territory, which has been going on largely in recent years. The smugglers seem to be most active in the forests of Bodianaykanur, Thevarom, and Parnapuram, in the Madura district. The Dewan has suggested to the British Government the expediency of employing a detachment of the British police for that purpose, the salaries of the men being met by that State. But the Political Resident there and the inspector of police have pointed out the inconvenience of placing any part of the British police force under the officers of a foreign State. The Government has accordingly advised the Government of Travancore to employ a cordon of its own police on the frontiers.

ERI SILK OF ASSAM.—Mr. Darrah, Director of Land Records and Agriculture in Assam, has issued a small pamphlet on the *eri*, which is the native name of the Assam silkworm, summarising what has been previously published on the cultivation and manufacture of the silk, and adding the results of the latest investigations and experiments. The native methods of hatching the eggs, rearing the worms, and spinning the silk have been repeatedly described; but, says the Calcutta *Englishman*, there has been no solution of the question how and when a people so extraordinarily unobservant of natural history and so unscientific as the Hindus, acquired the knowledge of a process more delicate and complicated than any of their agricultural operations. What they know remains in their hands from generation to generation precisely as they have received it. No change in any particular suggests itself to those whose life-work it is to rear the caterpillar and make the most of its silk. They have not even learnt to remove dirt and putrefying matter from the trays on which the insects drag on their not very healthy existence. The *eri* is cultivated in every district of Assam, but very little in the plains of Sylhet and Cachar. It is regarded as unclean by the higher castes of Hindus, but the hill tribes throughout the length and breadth of both ranges of mountains have no scruples, and make curry of the chrysalis after unwinding the cocoon. In the submontane country along the north of the districts of Goalpara,

Kamrup, Darrang, and Lakhimpur, almost every house has its patch of castor-oil plants, on which the *eri* feeds.

In Upper Assam generally, in the winter time, the ryots may be seen wrapped in warm sheets of their coarse silk; while in the southern hills from the Mikir country to the Garo, the tribes use the same silk for making the striped cloths which are their special fancy. There are some superior makes of this fabric which are nearly as white as linen, and "fine enough to make a travelling dress for a lady;" but they are all of the utmost durability. An ordinary sheet is considered to last for 30 years, and its price varies from Rs. 7 to Rs. 20, according to the quality. Estimates have been made of the value of *eri* produced in Assam, but as the silk is nearly all made for private use, and as the little trade that takes place at the local *hâts* or markets is irregular, there exist no materials from which actual statistics can be compiled. But the total amount must be very large, for the Bhutias alone take away from Rs. 50,000 to Rs. 100,000 worth from the annual fairs in Darrang and Kamrup districts. It was officially reported in 1884 that a trade in cocoons, to the extent of 400 or 500 cwt. yearly, had sprung up between Goalpara and Calcutta, whence the cocoons were shipped for England. Marwarris also, in their persistent secretive way, were taking the made cloth out of the province into Bengal for transmission to places and by means which they kept within their own counsel. In the same report it was stated that the Assamese were beginning to use cotton goods from England, and that that circumstance was affecting the production of silk. Notwithstanding, Mr. Darrah shows that *eri* cocoons have just doubled in price in the past six years, owing to the increased demand in England which has grown up since the discovery of machinery for utilising the cocoon.

The *eri* cocoon is not the beautiful piece of workmanship that the cocoon of the Chinese silkworm is, and it cannot therefore be reeled off in a continuous thread, but has to be spun, like wool or cotton. It is nearly 20 years since attempts to utilise the *eri* silk were first made in England; but it is only recently that spinning machinery has been improved sufficiently to disentangle the intractable cocoons. Since then English merchants have been eager to buy the raw product, and more than one firm have sent a representative all the way to India to study the market on the spot.

TRADE OF THE STRAITS SETTLEMENTS.—The *Penang Gazette* for the 16th December contains the following:—

From the quarterly return of imports and exports for the third quarter of 1890 just received, we find that, as compared with the similar period in 1889, there was a gross increase on the imports of Penang Settlement of 510,211 dols. and on the exports of 766,896 dols. As regards the whole colony of the Straits Settlements, the figures are an increase of 2,050,974 dols. and

566,168 dols. respectively. It will be noticed from this latter set of figures that Penang compares favourably with the rest of the colony, the gross returns for the three Settlements showing a total increase of imports over exports to the extent of 1,484,806 dols., which is not satisfactory.

CANADIAN TRADE IN 1889-90.—Comparing the statistics of the foreign trade of Canada for 1889-90 with those for 1888-89, the Toronto *Monetary Times* for the 5th December says:—

Canadian imports amounted in value during the twelve months ended with June last, to 121,856,000 dollars, and consisted of 35,598,000 dols. worth of free goods, and 86,258,000 dols. worth of dutiable goods. Then the value of Canadian exports is put down at 96,749,000 dols., adding which figure to that of the imports, we have 218,605,000 dols. as the amount of our aggregate trade in that year. There is an increase of about six and a half millions in imports compared with the preceding year, and an increase of more than seven and a half millions in exports. Of the aggregate inwards and outwards trade, therefore, the increase is over 14 millions of dollars, or between six and seven per cent.

The largest per-centage of trade done with any one country was with the United States, namely, 92,814,783 dols., or 44½ per cent., and Great Britain stands close beside, with 91,743,935 dols., which means 44 per cent.

THE FISHERIES OF CANADA.—Mr. C. C. Chipman, of the Canadian Department of Marine, has prepared an interesting statistical treatise on the fisheries of Canada. Commenting on this treatise, the *Canadian Gazette* for the 29th January says:—

Mr. Chipman has prepared an interesting record of the development of the industry. When Canada became a Confederation, the value of the total yield of the fisheries was 4,376,526 dols. only. By 1879 it had reached 13,529,254 dols.; and the last return of the Department places the total at 17,655,256 dols. During the 20 years, therefore, the value of the yield of Canada's fisheries has more than quadrupled. Turning to the value of fish exports, there is also a marked increase to note. In 1869 the total was 3,242,710 dols.; in 1879, 6,928,871 dols.; and now, 7,212,208 dols. The exports have, it will be seen, more than doubled in value during the two decades, and the fact that the increase in exports has not kept pace with the increase in yield is clear evidence of the fact that, thanks to greater facilities of transportation and, it may be, to the adoption of more enlightened views on the subject of fish as an article of food, the amount taken for home consumption has much increased of late years.

Nova Scotia is, of course, the great fish province of Canada. Taking the yield by provinces, it is seen that she easily heads the list, with a value of fish caught since Confederation of 135 million dols.—48 per cent., that is, of the total Canadian yield. New Brunswick comes next, with nearly 55 million dols., or 19 per cent. of the total Canadian yield; Quebec third, with 39½ million dols., or 14 per cent.; British Columbia fourth, with 19 million dols.; Prince Edward Island fifth, with 17⅛ million dols.; Ontario sixth, with 15¾ million dols.; and Manitoba and the Territories last, with a paltry 719,000 dols. The total yield since Confederation is given as 282½ million dols. in value, though a substantial addition must be made to represent the value of the fish consumed by the Indians of British Columbia, of which no complete account can be obtained. What wonder, then, that Professor Brown Goode, United States Commissioner at the London Fisheries Exhibition, should declare that he has been "perfectly amazed" at the rapidity with which this industry has been developed.

So vast and valuable an industry naturally employs a large army of men. Mr. Chipman gives the total at 68,000, but this does not include the considerable number of men, women, and children employed on shore in connexion with the fisheries proper. It is, indeed, probable that the grand total would not fall far short of 80,000, or one-half the number of the British army. As it is, the official total of 68,000 is almost double that of Canada's active militia.

The Toronto *Monetary Times* for the 5th December says:—

It used to be assumed, and not long ago either, that the quantity of fish in the sea could not be lessened by any possible mode of fishing. But experience seems to show that this is no longer true, owing to new engines of destruction. The United States Atlantic fisheries are far less productive than they were once; and if we may believe what is now said, our own are not free from danger. The Quebec Board of Trade has been taking evidence on this subject. M. Fafford, who has travelled much in Labrador, states that Newfoundland fishermen, by using the purse net, are putting Canadian fisheries in peril. Besides this, another process, intended to frighten the fish into the nets, is said to check reproduction. An appeal, it is said, will be made to the Federal Government to put an end to these destructive methods, and it is not likely that the application of the needed remedy will be delayed.

Canadian Failures in 1890.—Reports to *Bradstreet's* give 1,626 failures in the dominion of Canada and Newfoundland for 1890, only 10 more than 1889. Aggregate liabilities are 12,482,000 dols., against 13,147,000 dols. in 1889, while the assets equal 6,746,000 dols., as compared with 6,110,000 dols. in 1889. Ontario had 837 failures, 25 less than in 1889, with 5,657,000 dols. of liabilities, against 6,143,000 dols. in 1889, and 2,459,000 dols. of assets, against 2,835,000 dols. in 1889. Quebec reported 491

failures in 1890, or 33 less than in 1889. The gross liabilities were 4,027,000 dols. last year, and 5,552,000 in 1889. The total assets for 1890 were 2,585,000 dols., against 2,568,000 dols. in 1889. The failures in New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, Manitoba, North-West Territory, and in British Columbia were each more numerous than in 1889, and except in Prince Edward Island, the totals of liabilities of failing traders were also larger in 1890 than in 1889.

THE LUMBER TRADE OF EASTERN CANADA IN 1890.—Mr. J. B. Snowball, of Chatham, New Brunswick, in his annual Wood Trade Circular, says that the export from the province was 38,000 St. Petersburg standards less than last year, and 9,000 standards below the average of the past 10 years. The decrease has been general from all New Brunswick ports, excepting Richibucto, but the large falling off has been at St. John, 24,000, and Miramichi, 11,000 St. Petersburg standards. The shipments from St. John to Liverpool fell off 45 per cent., and from Miramichi to Liverpool 63 per cent., while those to Irish ports are up to last year's, and to continental and other ports they are largely increased. On account of the heavy tax imposed by the Government, the province of New Brunswick is, it is pointed out, fast losing the monopoly it so long held of the best of the spruce trade, and while the exports have so largely decreased, the trade of Nova Scotia and Quebec shows a marked increase for the past seven years. The winter operations in the forests are small, and the estimated production will not exceed two-thirds of that of last year.

The total transatlantic lumber shipments of New Brunswick in 1890, as compared with 1889, were as follows, the measurements being superficial feet of deal, &c.: 1889, 369,031,274; 1890, 293,364,928; tons timber, 93,329 in 1889, and 6,229 in 1890. The shipments from New Brunswick for the past 10 years have been, in millions of feet: 1881, 394; 1882, 376; 1883, 411; 1884, 333; 1885, 292; 1886, 276; 1887, 250; 1888, 277; 1889, 369; 1890, 293. The shipments of deal from Nova Scotia to transatlantic ports have been, in millions of feet: 1882, 85; 1883, 78; 1884, 69; 1885, 79; 1886, 87; 1887, 83, 1888, 85; 1889, 92; 1890, 99. Nova Scotia also exported 4,668 tons of birch timber, viz., 1,172 tons from Halifax, and 3,496 tons from Pictou.

QUEBEC CROWN LANDS. — According to the *Canadian Gazette* for the 22nd Jannary, the 1890 report of the Commissioner of Crown Lands of the Province of Quebec shows the revenue to have been 918,627 dols. During the year there were sold 129,214 acres of Crown lands, the price realised being 53,870 dols.; the receipts on this amount and for previous sales being during the year 59,565 dols. The sources of these revenues

are thus divided: arable lands, 51,580·98 dols.; mining lands, 7,985,000 dols. Four half lots containing 200 acres have been granted free for purposes of worship.

On June 30th, 1889, there were in the province of Quebec, 7,392,848 acres of land subdivided into farm lots; there have been added thereto since 72,722 acres, recently surveyed, besides 31,710 acres restored to the domain of the Crown, in consequence of the cancellation of certain sales; making, on June 30th, 1890, after deduction of lands sold and granted during the preceding twelve months (129,214 acres), 7,368,066 acres not disposed of.

There have been sold 3,780 acres of these reserves for the sum of 1,259 dols., and the collection of these sales and on previous sales amounted to 1,784 dols. On June 30th last the extent of these reserves was about 130,509 acres. The Jesuits' estates have brought into the Treasury the sum of 11,896 dols., and the cost of collection has been 1,166 dols.

There have been collected 8,815 dols. on account of the old and new sales of beach lots. The domain proper has yielded 803 dols., making a total of 9,619 dols. 69 cents. The disbursements have been 663 dols. The sums collected for fishing leases and permits, on salmon rivers and certain lakes in the interior, have amounted to 9,811 dols.; while the dues, permits, ground rents, &c., have yielded 806,051 dols. Furthermore, there have been collected 3,770 dols. in the shape of fees or from various sources, besides 11,921 dols. put to deposit account.

The Industrial and Commercial Progress of Jamaica.—The following remarks on the condition of Jamaica are extracted from the report of the Governor of Jamaica on the Blue Book of that colony for the year 1888-89:—

The year 1887–88 marks the end of a period of depression. It opened with a deficit in public revenue of 12,628*l.*, and closed with a surplus of 30,054*l.*; this surplus had increased by the end of the year 1888–89 to 56,538*l.* The growth of prosperity thus indicated has been maintained, and promises to continue.

The Government Savings Bank shows an increase of 185 in the number of depositors and of 14,963*l.* in the total amount of deposits. The fruit trade, especially that in bananas, is daily expanding, and to meet the wants of the local growers the telegraph system is being rapidly extended. The cultivation of sugar shows a decrease as steady as that of bananas shows an increase, and there seems every probability that the cultivation may be still further restricted. The cause of the abandonment of the estates is attributed to the low price of sugar, and in some cases to the difficulty of obtaining labour. No doubt heavily incumbered sugar estates belonging to absentee owners do not pay under the present system of cultivation of the canes, and manufacture of sugar and rum. But with the separation of the

business of manufacture from that of cultivation, and the concentration of the planter's attention on the improvement in the cultivation and the quality of the cane, sugar-growing would be a safe and profitable investment. It is much to be regretted that the cultivation of sugar estates should decrease, for the sugar cane, unlike the banana, cannot be destroyed by a hurricane, and thus offers a steady field for labour in the event of such a calamity. The difficulty of obtaining labour is no doubt serious; that there is difficulty is not to be attributed to the laziness of the population, but rather to their determination to invest in land and to work upon it for their own profit. The consequence of this determination is a gradual migration from the plains to the hills, where land can more readily be secured, and where a very thriving peasant proprietary has sprung into existence, and these owners have become the principal producers of fruit.

With such variety of temperature, aspect, and soil as is found in Jamaica, the range of productions is very wide, and the island offers excellent investments for agriculturists with comparatively small capital. Attempts have been made to introduce the cultivation of the Pita plant, now being so extensively cultivated in the Bahamas. There is no doubt that this will grow over a great portion of the white limestone country, and may be a valuable addition to the resources of the island, as it is even less liable than the sugar cane to injury from possible hurricane.

In the parish of Westmoreland and other western parishes a considerable area has been placed under rice, and crops of very good quality have been reaped. As Jamaica imports over seven million of pounds of rice annually this cultivation may attain very large proportions.

The importation of manufactured goods from the United Kingdom has decreased by 7·8 per cent. of the total imports, while those from the United States have increased by 6·2 per cent. and from Canada by 2·6 per cent. The importation of leather, boots, and shoes from the United Kingdom has decreased from 41,476*l.* in 1888 to 37,065*l.* in 1889, while the importation of those goods from the United States has increased from 3,903*l.* to 9,316*l.* In the same period the exports to the United Kingdom have increased by 2·9 per cent. of the whole, while those to the United States have decreased by 7 per cent.

Many companies have been formed during the year, among which is a fruit-trading company, composed entirely of small settlers. The future of this company will be instructive, as showing what power of active co-operation in business affairs exists among the black people. A saw-mills company has been formed in Manchester, and the foundation stone was laid of the first large hotel ever built in Jamaica. This hotel is now rapidly approaching completion, and will no doubt attract many visitors to Jamaica, from which travellers have hitherto been repelled for want of proper accommodation.

But the most important event of the year was the passing of the Jamaica Railway Company's law, by which the existing

lines, a good and paying property, were handed over to an American syndicate on certain conditions laid down in the law, one of which is the building of extensions to Montego Bay and Port Antonio, a distance of 125 miles.

In September 1889 the first steps were taken towards the holding of an exhibition in Kingston. The idea has been most warmly taken up in every part of the island, and a sum of nearly 30,000*l.* has been guaranteed towards the expenses. Space has been applied for by several West Indian colonies, by Canada, by England, exhibitors from Scotland, Ireland, Germany, and Russia, and in every part of Jamaica people were looking round to see in what way the resources of the island may be developed. In Kingston all tradesmen are fully employed, houses are being built and repaired in every direction, and improvements are going on with unprecedented rapidity.

Population of Victoria.—The Government Statist of Victoria has prepared a return, published in the Victorian *Government Gazette*, showing the estimated population of the colony on 30th September last. The additions to the population, as shown by births in the colony, and the arrivals by sea, are 23,639; and the deaths and departures are estimated at 14,754, giving an increase during the quarter of 8,885. The estimated population on 30th June was 1,131,247, and consequently the estimated population on 30th September was 1,140,132. The excess of births over deaths during last quarter was 5,972, and the excess of recorded arrivals over recorded and unrecorded departures (the latter being estimated) was 2,913. The total allowance for unrecorded departures since the census of 1881 was taken has been 51,824, viz., 41,109 of males and 10,715 of females. Had no such allowance been made, the apparent population at the end of September would have been 1,191,956, viz., 644,947 males and 547,009 females.

Railway Traffic Earnings in New South Wales.—In a communication to the Board of Trade, dated the 21st January, the Secretary to the New South Wales Government Agency forwards a statement of the Government railways and tramways revenue of New South Wales for the month and ten months ended 31st October last.

According to this statement the earnings of the railways in October last amounted to 269,044*l.*, as against 283,773*l.* for the corresponding month of 1889. In the ten months the aggregate earnings were 2,121,212*l.*, as compared with 2,047,184 in 1889. The miles of line open reached 2,182 in 1890, against 2,171 in 1889.

As regards the tramways, the receipts for the month of October 1890 amounted to 24,082, as against 22,369 for the corresponding month of 1889. The aggregate receipts for the ten months were 225,921*l.*, as compared with 212,375*l.* Length of lines open in 1890, 39½ miles; in 1889, 39½ miles.

THE MINERAL WEALTH OF SOUTH AUSTRALIA.—The work of developing the mineral resources of the province of South Australia in the more settled districts has, generally speaking, been carried out in so spasmodic and desultory a fashion that it is not to be wondered at, says the *Adelaide Observer*, that the attempts to prove the richness of the underground deposits in the more inaccessible regions of the Far North should hitherto have been of a tentative and unsystematic character. For a time the conviction that ruby fields of immense extent and untold value had been discovered, excited the liveliest interest in the domains bordering upon the Northern Territory, but the doubts thrown upon the genuineness of those gems caused such a revulsion of feeling that the investing public suddenly lost faith in the country, and refused to be tempted by the most glowing reports of mineral wealth awaiting development there. But the information which has lately come to hand respecting one of the natural products said to exist in the Far North in almost unlimited quantity, is well calculated to recall attention to the discredited territory. This product is mica, concerning which many interesting facts have recently been published. Certainly the sample parcel of the mineral which has been brought to Adelaide by Mr. Benstead points to the existence of an exceedingly rich deposit. It is proposed to ship this parcel to London to ascertain its value, and to find out what sort of an outlet there is for the article. Upon the latter point there seems to be little cause for apprehension, as mica is now largely used in manufactures, and the size of the South Australian mineral is said to be greatly in its favour. For some time past Mr. Crooks, of Port Adelaide, has been interesting himself in the matter, and on his return from England some two years ago he stated that an expert in London had been favourably impressed with the specimens shown him. Mica, it appears, is very largely employed in the construction of electric and other machinery, and for such purposes is in good demand. At present the high price is a drawback, but no doubt increased production will result in reduced rates and largely increased consumption. When Mr. Crooks was in London there was an extensive Russian order in the hands of a broker, and two parcels, each realising about 1,000*l.* had been sold to a German merchant Mr. Benstead is convinced that in the MacDonnell Ranges other minerals are to be found in quantity.

WOOL-GROWING IN NEW ZEALAND. — The United States Consul at Auckland, in a recent report to the State Department at Washington, with regard to wool-growing in New Zealand, says :—

"I have endeavoured to procure some reliable information in regard to the cost of wool-growing in New Zealand, which, I hope, may prove interesting to those engaged in similar occupations elsewhere.

"Some months ago I received a communication from a gentleman in Philadelphia requesting information pertaining to the cost of sheep-raising and wool-growing. I accordingly submit the following as the result of my labours in answer to the questions propounded by him.

"The average cost per sheep a year to the breeders (all expenses) is about 60 cents. The average proportion of sheep to attendants is one attendant to every 5,000 sheep. The average weight of a fleece is: Merinos, 5 pounds; cross-breeds, 8 pounds. The average price that the breeders receive per pound of wool is from 10 to 23 cents in the grease, average 17 cents per pound. The average size of a flock on stations is from 30,000 to 80,000, and in paddock farming (inclosed in fields) 200 to 3,000 sheep. Owing to the mildness of the climate, shelter beyond that which is furnished by hedges is not necessary. The character of their food is principally grass, except where sheep are being prepared for freezing and export to England, when they are fed on grass and turnips. The proportion of sheep and lambs lost annually from exposure is about 5 per cent. It is found that sheep imported into New Zealand improve very much, both in constitution and in quality. It is generally attributed to the uniform mildness of the climate; no other satisfactory answer to this question is obtainable, although I have made numerous inquiries amongst those who are familiar with the subject, than that the land, grass and climate, are peculiarly adapted to sheep raising.

"The number of sheep exported last year with and without wool amounted to 1,964,281. Thirty-seven thousand eight hundred and twenty-six of the above number were shipped to the West Coast of America (San Francisco).

"The total value of wool exported from 1880 to 1889, inclusive, was 207,622,565 dollars. The wool export for 1880 was 66,860,150 pounds, valued at 17,473,450 dollars, whilst the returns for 1889 show the wool shipments to be 102,227,354 pounds (28,037,005 dollars), an increase during the 10 years of 10,563,550 dollars."

THE DEVELOPMENT OF SIERRA LEONE.—In the report of the Colonial Secretary of the colony of Sierra Leone on the Blue Book for the year 1889, the following remarks as to the capabilities of that place occur:—

The resources of the colony and the adjacent countries are to a great extent yet undeveloped, and there is ample field for enterprise in this direction. Cotton and indigo grow wild in the country, and, no doubt, many oil, dye, and fibre-producing plants of value are in existence. Little or nothing is done in the way of agriculture, and it is a pity that more attention is not given to this instead of to petty trading, in which so large a portion of the community is engaged. Market gardening in the neighbourhood of Freetown should most surely prove a lucrative industry, as there would undoubtedly be a large demand for vegetables from the steamers and men-of-war in addition to the local consumption, if a good market of such was established. Most of the ordinary vegetables and herbs grown in England can, experience has proved, be cultivated successfully in this climate, but the present supply is limited as to quantity and variety.

Three or four native gentlemen have started plantations of coffee, cocoa, tapioca, &c., the French company has a coffee plantation at Kent, and the American mission at Shaingay has proved that coffee can be most successfully grown.

That the colony contributes little towards the export trade at the present, anyone has only to glance at the return of exports to ascertain.

The total value of exports during the year under review was 319,719*l.*, of which only 6,879*l.* was for produce and manufactures of the colony; the chief article being ginger to America to the value of 4,830*l.*, and to Great Britain 1,523*l.*

TRADE AND SHIPPING RETURNS OF THE CAPE OF GOOD HOPE.—The *Cape of Good Hope Government Gazette* for the 16th January publishes the official trade and shipping returns of Cape Colony for the year ended 31st December 1890, compared with the year ended 31st December 1889.

The total value of the imports in 1890 was 10,106,466*l.*, made up as follows:—merchandise, 8,470,550*l.*; Colonial Government articles, 895,896*l.*; specie, 740,020*l.* The total imports for 1889 were valued at 10,841,454*l.*, or 734,988*l.* more.

The exports in 1890 reached a total value of 10,101,739*l.*, an increase over the previous year of 457,203*l.* The various exports were distributed as follows:—Produce of colony (exclusive of gold, diamonds, and specie), 4,362,116*l.*; diamonds (through post office, Kimberley), declared value, 4,162,010*l.*; gold (bar, dust, and nuggets), 1,445,039*l.*; specie, 132,574*l.*

The respective amounts collected for Customs duty in 1890 and 1889 were 1,352,955*l.* and 1,226,602*l.*

Coming to the statement of shipping, it appears that the number of vessels entered inwards in 1890 was 2,249, with a tonnage of 4,007,010 tons, and cleared outwards 2,275, with a tonnage of 4,012,905 tons. Compared with 1889, the vessels entered inwards show a decrease of 16 in number but an increase of 210,155 tons in tonnage, while with the vessels cleared outwards there were increases both in number and tonnage of 20 and 241,560 tons respectively.

Revenue Returns of the Cape of Good Hope.—Communications have been received from the Agent-General for the Cape of Good Hope, enclosing copies of comparative statements, from which it appears that the revenue received in the month of November 1890, amounted to 321,372*l.*, showing a net decrease of 32,250*l.* on the amount for the corresponding month of 1889. In the month of December it amounted to 319,767*l.*, a net decrease of 28,958*l.* on the amount for the corresponding month of 1889. For the six months ended December 1890, the revenue was 2,011,245*l.*, which is a decrease on the corresponding amount in 1889 of 42,136*l.*

IX.—BELGIAN FOOD ADULTERATION LAW.

On the 15th January regulations fixed by the Belgian Legislature, having for their object the prevention of the adulteration of food products, were to come into force in Belgium.

The first relates to the sale of artificial butters, otherwise called margarine, and, as stated by the *Journal de la Chambre de Commerce de Constantinople*, it stipulates that warehouses, shops, depôts, as well as market stalls where margarine is exposed for sale, must present to the public view, in distinct and indelible characters, the inscription, *Sale of margarine.*

Casks, covers, and receptacles in which margarine is placed for sale by a shop-keeper, or which are employed by the makers, wholesale dealers, importers, exporters, consignors, and consignees of this product, must also bear, in distinct and indelible characters, the word *Margarine.* Further, if the margarine intended for sale is contained in cases, casks, or receptacles not opened, the inscription will mention the name or description of the maker.

Articles and wrappers in which margarine is delivered to the purchaser by a retail dealer, must bear, in distinct and indelible characters, the word *Margarine*, and the statement of the name or description of the seller must in the inscription immediately precede or follow the word *Margarine.*

As regards consignments, the makers, merchants, consignors, or consignees of the margarine must state on the invoices and way-bills or bills of lading for each individual consignment, that the merchandise despatched is sold as margarine.

If the margarine is sold or exposed for sale in the form of cakes or loaves, these must take the form of a cube. They must be marked, moreover, with an imprint bearing the word *Margarine,* as well as the name or description of the maker, unless the receptacles themselves do not bear these indications.

The second of these regulations relates to the sale of food products containing saccharin. It provides as follows:—

1. Under the name of products in which saccharin enters (*produit saccharin*é) is understood any commodity sweetened by the aid of matters of which the chemical composition and physiological properties differ entirely from those of common sugar or sugars derived from amylaceous substances (maltose, glucose).

2. Proprietors of breweries, glucose factories, confectionery establishments, factories of liqueurs, chocolates, and other food products, who use saccharin in their manufacture, are obliged to have the following words painted in large characters: *Saccharin products* (*produits saccharines*) on the outside of the principal entrance to their works and warehouses.

Warehouses, shops, depôts, as well as stalls and all places of sale where saccharin products are exposed for sale, must exhibit

in a conspicuous place, in distinct and indelible characters, the words, *Saccharin products.*

3. Casks, covers, or any receptacles in which saccharin products are placed for sale by a dealer, or which are used by the makers, wholesale merchants, importers, exporters, consignors, and consignees of these products, must also bear, in distinct and indelible characters, the word *Saccharin.*

Further, if the product containing saccharin intended for sale is contained in cases, casks, or receptacles not opened, the inscription will mention the name or social position of the maker.

4. Receptacles in which the product containing saccharin is delivered to the purchaser by a retail trader must bear, in distinct and indelible characters, the word *Saccharinated* (*saccharine*), as well as the name or social position of the trader or retailer.

5. As regards consignments, the makers, merchants, exporters, or consignees of the products containing saccharin must indicate on the invoices and way-bills or bills of lading, for each individual consignment, that the merchandise exported is sold as a product containing saccharin.

Two other sets of regulations, which come into force on the 1st October 1891, deal with the artificial colouring of food products and with the utensils, &c. used in the industry and trade in food products.

The first stipulates as follows :—

It is forbidden to use for the colouring of food products, such as bonbons, pastilles, sweetmeats, pastries, food pastes, confections, marmalades, syrups, liqueurs, wines, fruits, vegetables, &c., intended for sale, any poisonous colouring matter.

A list of harmless colouring matters, and a list of colours considered as iujurious, will be published by the Ministry of agriculture, industry, and public works.

It is forbidden to sell, to expose for sale, to detain or to transport for sale, any food product manufactured or prepared contrary to the above regulations.

The receptacles or wrappers in which coloured or artificially coloured food products are contained for sale, either wholesale or retail, must bear, in plain characters, the name and description as well as the address of the seller.

The second set of regulations prohibits the use, for the preparation, preservation, or packing of food products intended for the sale of these commodities, of any utensils, receptacles, or different objects containing any properties which by contact with the substance they contain become poisonous or injurious to health.

Lead and zinc, as well as alloys, platings, solderings, and enamels containing these metals, arsenic, antimony, or their compounds, must especially be considered as poisonous or injurious to health in the sense of the present regulations.

The above regulations are not applicable to preserve boxes of iron plated with pure tin of which the solderings are external

and are made of an alloy of tin and lead in the proportion of a maximum of 10 per cent. of the latter.

It is forbidden to sell, to expose for sale, to detain or transport for sale, prepared food substances preserved or packed in any way contrary to the dispositions of the present regulations.

It is forbidden to sell or expose for sale, to detain or transport for sale, apparatus, utensils, or articles intended for the preparation, preservation, packing, sale, or manipulation of food products, of which the use is forbidden by the preceding articles.

Any apparatus, utensil, receptacle, or article, of which the parts placed or likely to be placed in contact with food products in a factory, warehouse, or store of these commodities contain tin, metallic alloys, enamels, or colouring materials, must bear, in legible characters, the name or position as well as the address of the maker.

Contraventions of the law will be punishable with fines prescribed by the law of the 4th August, without prejudice to the application of the penalties prescribed by the Penal Code.

X.—SWISS FACTORY LAW.

The *Reichsanzeiger* of December 20th last, in an article calling attention to the work recently written by Privy Councillor Dr. König, and published in Berlin, dealing with the administration of the Swiss Factory Law, says:—

The author of this work spent some time in Switzerland last summer in order to closely study the working of the Swiss Factory Law, and now publishes the result of his observations. This law, the votes for and against which were 181,204 and 170,857 respectively, was enacted on the 23rd March 1877, coming into operation on the 1st January 1878. It has frequently played a part in discussions affecting questions of labour protection, and, as is common enough in such cases, became a watchword available for friend or foe in political strife, much ignorance at the same time prevailing as to its provisions. Dr. König in his work aims at remedying this ignorance, and the book will meet with a welcome reception by all who are interested in the question of labour protection.

That part of the Swiss Factory Law which fixes 11 hours as the maximum duration of the working day excites the greatest interest in Germany, giving rise at the same time in various circles to a wish for a similar legal limit in that country.

While Dr. König's work goes to show that this provision has now, as it were, entered into the flesh and blood of the nation, it

also adduces abundant evidence of the fact that its administration neither is, nor can be, rigidly carried out. According to the author's opinion this is due to a variety of causes: a Republican constitution, the absolute control of the cantons in administering the law, while the Federal Council merely watches over the administration, the lack of a permanent body of officials, the latter being only elected for short periods, and being more or less dependent on popular sentiment, a circumstance which necessitates a constant regard for prevailing opinions and interests; furthermore, the reluctance felt for altering existing law, and dread of the *referendum*, which act as a check upon wholesale changes in law. As a natural consequence of all these conditions the administration of the law adapts itself more readily to practical exigencies in Switzerland than it would in Germany; it is subject to modification in the various cantons, and always so as to work harmoniously with prevailing interests as far as possible. This will explain why the eleven-hour law works well in Switzerland, and the difficulties which would lie in the way of similar legislation in Germany. The Swiss law enacts that a temporary extension of the working day during a period not exceeding two weeks may be allowed by the local authorities with the sanction of the cantonal government. It will be readily surmised that, what with the power of the cantons to sanction an extension of the working day, and the various circumstances already referred to, those cantons which voted against the law did not go out of their way to assist in administering it, and frequently avail themselves largely of their power for lengthening the working day.

The Confederate Council has all along endeavoured to apply some remedy in this direction; still, great arbitrariness and disparity prevails in the granting of permits for overtime, there being neither a fixed maximum nor a basis for granting them.

As to night work, this is only permissible under exceptional circumstances; if it is to last for more than a fortnight the permission must be obtained firstly of the cantonal government, then of the Confederate Council. Sunday labour, except in cases of urgency, is forbidden; such establishments, however, the work of which from its nature must proceed without a break, obtain permission from the Confederate Council. The number of factories holding licences for Sunday and night work on the 31st December 1889 was 165, or 42 per cent. of all factories coming under the provisions of this law. The provisions dealing with Sunday and night work have proved judicious and effectual.

Females and young persons under 18 years of age are forbidden to do either Sunday or night work. Women having charge of a household must be allowed to leave half an hour before the others for the mid-day interval when the latter does not amount to at least an hour and a half. This section of the law is not rigidly applied. There are no further limitations placed upon either female or child labour, nor are there any with regard to married women as such. It is worth noting, too, that for youthful

labourers there is neither a mid-day interval laid down, nor is their working day shorter than that of others.

Women who have been confined are forbidden to resume work within six weeks after confinement, making together, with a fortnight before the same, a period of two months during which they are locked out. According to this provision, lying-in lists are kept at all factories.

There has been within the last eight years a considerable falling off in the amount of youthful and child labour employed, a fact which is not attributable to the law, but to the low estimation in which both kinds of labour are held. On the other hand female labour has been on the increase. Although the proposal for excluding children under 14 from factories met at first with vehement opposition, still, this provision, as well as those regarding night and Sunday work, and the employment of female and youthful labour, has been on the whole satisfactorily administered. Children under 14 are now to be seen only in tobacco and embroidery works. Equally successful (though met by some opposition) is the enforcing of the provision rendering it obligatory upon factory owners to hear the opinions of their employés before issue of any regulations. Lock-outs have, up to the present, been unknown, but some large machine factories in the canton of Zürich have recently been meditating a step in this direction.

Factory rules are examined by the cantonal governments and factory inspectors, who make not only such alterations as may seem to them to be necessary from a legal standpoint, but even such as may in their opinion be desirable from the point of equity and judiciousness, and factory owners generally submit to their ruling.

In his chapter on "notices and payment of wages" Dr. König calls attention to the right of factory owners to keep back on pay-day the wages of the preceding week. This right of "*déscompte*" must, however, either be expressly mentioned in the factory regulations or in a special agreement. The "*déscompte*" takes the place of a guarantee for the due discharge on the part of the employé of the duties undertaken, and that the latter will not leave without due notice. Although it has not succeeded as a means for averting general strikes, still, as a means of obviating smaller ones as well as breaches of contract on the part of individuals, it is effectual. Employers regard the retention of this clause as of great importance, while the labour party agitate for its repeal when the law is being revised. Some employers require additional security against breaches of contract.

Contraventions, either of the law or of the written directions of the officials, are punishable with fines varying between 5 and 500 francs for the first offence, and with imprisonment for a period not exceeding three months for subsequent offences. The sentences of the courts are as a rule light, and up to the present there have been no cases of imprisonment. In certain cantons, as, for instance, Zürich, the local authorities are empowered to fix

the sentence provisionally through the Legislature of the canton, and such sentences have proved more effectual than those passed by the courts of law.

As a result of the resolution passed by the Berlin Conference for the protection of labour, a law was passed on the 27th June 1890, fixing 12 hours as the duration of the working day of all persons employed on railways and other transport enterprises.

For those immediately connected with the working of the trains there must be a daily cessation from work of at least 10 hours' duration. Railway officials, clerks, and labourers, must be allowed at least 52 holidays in the year, of which 17 must fall on Sunday. There must be no goods service on Sundays; cattle and goods may, however, be forwarded by fast trains.

In addition to the factory law, there has been legislation in the interests of women engaged in the clothing and millinery trade. It has also been decided to introduce insurance against accident and sickness.

The author considers the "*referendum*" as an effectual check upon the further demands of the labour party, such, for instance, as their demand for a ten-hour law, for this reason, that not only would the voice of factory owners and artizans, but that of the agricultural section, which constitutes one-half of the whole population, be raised against such proposals. In fine, it is an undoubted fact that the factory law, notwithstanding its defects, has not been injurious to industry; there has been neither a falling off in production nor a rise in prices. On the other hand, the workers themselves esteem the law the more the longer they are acquainted with it, and their unions carefully watch over its enforcement, and all political parties at least agree that the amount of protection accorded to the labourers by this law is both necessary and wholesome.

XI.—MINERALS USED IN IRON SMELTING IN INDIA.

A publication entitled "The Mineral Wealth of India," by Captain Collingwood Townsend, of the Indian Ordnance Department, has been received at the Board of Trade. This work is divided into the following 10 chapters:—I. Local iron ores. II. Value of English skill. III. Local manufacture of wrought iron. IV. The baser metals. V. The minerals useful in iron smelting. VI. Fuel. VII. and VIII. The advantages and disadvantages of Indian workmen. IX. Artisan *versus* clerk. X. Work and wages. The following information on the subject of the minerals found in India useful in iron smelting is extracted from Chapter V.:—

Next to iron and coal the minerals of most importance to anyone interested in the development of the Indian manufacturing industries are those incidentally useful in the working of iron. Foremost among these stands limestone, which is essential if we wish to obtain iron from the ore on a commercial scale. Fortunately this mineral is found in great quantities at or near the probable iron mines of the future. They vary, however, very greatly in quality, many beds containing a heavy proportion of worthless ingredients. Carbonate of lime is the chemical required for foundry work, and that limestone is the best which contains the greatest quantity. The proportions vary immensely, as will be seen from an examination of samples from different beds. Some calcareous tufa in the Darjeeling range showed 98½ per cent. of pure carbonate of lime and only 1½ per cent. of foreign matters, of which all but an infinitesimal fraction consisted of magnesia. On the other hand, samples taken from the Pachete rocks near the Raniganj coal-fields showed on analysis only 45 per cent. of calcium carbonate, the balance being chiefly made up of 11½ per cent. of magnesium carbonate and *over* 39 *per cent. of insoluble matter.* It is this high per-centage of insoluble matter which is the great objection to the use of the Raniganj limestone, otherwise the beds of Hansapathar, which shows 83½ per cent. of calcium chloride, would do well enough if the insoluble matter amounting to some 16 per cent. could be eliminated. In the Wardha Valley, another great iron-field, limestone is found containing from 94 to 97 per cent. of carbonate of lime and only two per cent. of insoluble matter, an advantage that would tell heavily in favour of any works for reducing iron ore established in that district. The best limestone is found in the Vindhyan range, and could be cheaply transported to any works that would probably be erected. There is no limestone actually available at Salem, though the iron-fields there are the richest in India; but it occurs in many places in the Madras Presidency, sometimes

with only two per cent. of impurities. So valuable, however, are the Salem iron-fields that it would pay to transport whatever limestone might be necessary for works erected there, especially as it can be obtained near the line of rail. Nature has been prolific in her stores of all required to develop the iron ores of India, but we seem unable to realise the wealth lying at our feet.

Next to limestone, fireclay is one of the most necessary products, for imported bricks and clay are very costly. The best fireclays are found in England, as in India, in the beds underlying the coal seams. Excellent bricks have been made from the Raniganj clays, and have successfully passed very severe tests in the Calcutta mint. The cost of firebricks made from them is, moreover, only Rs. 2–8 per hundred—about a quarter of those obtained from England. When the Bengal Iron Works Company was in existence, it used bricks made of local clay with good results. Good fireclay is also found in the Madras Presidency and in the Wardha Valley. We have, however, grave doubts as to the value of Indian firebricks, as hitherto made, for the inner layer of iron furnaces. They do extremely well for all parts of the furnace, if fortified with a lining of English bricks. This, however, appears to be necessary where great or prolonged heats are obtained. It is quite possible, however, that an increased demand might develop some better method of treating the local clays, so that they would make bricks suitable even for furnace linings. That they can be used in all other positions is an enormous saving, and the cost of importing English bricks for lining only would not be excessive, and should not stand in the way of a foundry.

Graphite is another substance of great value in a foundry, as the cost of imported crucibles is very great. The drawback of local graphite is the high per-centage of impurities. Good specimens have been found in Travancore, which have been worked up into crucibles suitable for all but excessive heats. It is more than probable that if a proper system of manufacturing crucibles under pressure was started in Madras, the results would prove of great value if annealed—a precaution which should be taken in this country even with imported crucibles—and it would perhaps be worth trying. Considering the high position held by Ceylon graphite in the commercial world, it would probably be better to import this material, as the cost of transport would not be great, and Ceylon graphite could be made into crucibles, as well in India as in England, if proper machinery was set up. It is a valuable industry and well worthy of encouragement, though utterly overlooked up to now. A demand would create a supply, and a steady and scientific attempt to develop local ores would soon create this demand. Everything depends on a start being made in the direction of developing local iron ores; that once done, all the rest will follow. It is useless to try and make graphite crucibles in India without hydraulic pressure and the proper machinery, since crucibles thus made crumble too much in the

fire to be able to stand great heats, though useful enough for small brass castings of a few pounds only. It is so important to obtain good local crucibles for economy in working, even if they be made from Ceylon graphite, that it is strange the matter has never been taken up before. Possibly the comparatively small demand has prevented any attempt in this direction, but if large local works were established, their demand would be considerable, and should be met accordingly.

Manganese is also procurable in India, though no large quantities are known to exist in any one place:—"The "commonest ores are manganite or grey oxide; wad or earthy "protoxide; pyroluxite, or the black peroxide; psilomelane, "a combination of the oxide of baryta; hausmanite, or peroxide "occurring with other ores of the metal; and braunite, or "binoxide in combination with iron peroxide, silica, and "magnesia." The latter is found in Vizagapatam and Bimlipatam, the beds in the former district yielding sufficient for working iron on a considerable scale even as already discovered, while careful search may reveal larger beds. Psilomelane and pyroluxite are found in the Central Provinces, where they have long been used in glass making, but have not been worked to any great extent. These specimens contain more oxygen than those in the Madras Presidency. Braunite is found in the Nagpore district, and was reported by the executive engineer of the Kanhand district as lying in a bed a quarter of a mile long and 10 feet thick. Thus we see that sufficient manganese is already known to exist in India to provide for the necessities of any iron industry likely to be developed in 20 years. Even if no more beds were discovered, the cost of importing sufficient spiegeleisen should not be so great as to affect the iron industry materially. Considering the fact that manganese deposits frequently occur in laterite, it is more than probable that a careful search among the laterite rocks of the Eastern and Western Ghauts, in the Rajmahal Hills, and in Orissa would result in the discovery of extensive manganese beds; but no such search could well be carried out with the necessary thoroughness until the demand for manganese that must follow the erection of smelting furnaces in India should make it remunerative, nor could it be reasonably expected.

Nickel has not been mined in India hitherto, possibly from the absence of any demand, for traces of the metal have been reported from Rajpootana and Khetre, though only as occurring in connexion with other metals, such as copper and cobalt. It is, however, unlikely that the Indian iron industries will advance to the point of making nickel steel, at any rate for the present, though the iron ore in Salem and elsewhere is so good that there are no limits to the possible development of the metal. With magnificent ore and fine charcoal, only science and skill are required to produce the very finest results.

Chromium, so useful in the manufacture of chrome steel, is found in the form of chromite in the Salem district. The Porto Novo Company, started in 1833, was called the "Indian Steel,

Iron, and Chrome Company," and opened a chromite mine at Curpur, from which ore was exported to England. It is stated in Ball's Economic Geology that "the principal rock in the low "hills at the south-west base of the Shevaroy Hills, where the "mines are situated, are hornblende, mica, and talcose schists "penetrated by dykes of basalt and layers of serpentine, which "last is intersected by a perfect network of veins of magnesite. "The chromite occurs very irregularly in these veins in lenticular "masses of various shapes and sizes; one block was said to "weigh a couple of tons. At a depth of from 50 to 60 feet "water became troublesome in the mines. It is not surprising, "therefore, that mining became too expensive to be continued "with profit, there being no certainty as to the proportion which "the chromite bore to the mass of rock which had to be removed. "At the same time the demand for this ore was by no means "unlimited, and the immediate effect of throwing the Indian ore "on the London market is stated to have been to cause a fall in "price." The truth is that all the materials required for a successful iron industry are to be found in India, and only the energy to develop them is wanted. The failure of the feeble attempts that have been made from time to time to develop the iron ores seems to have been accepted as proof that they are not worth working. No other reasonable explanation for the supineness of capitalists in this direction seems forthcoming. The power of India will grow with her iron, as without it the resources of the country can never be fully developed.

XII.—THE INDIAN COAL FIELDS.

The following account of the coal-fields of British India is extracted from the *Times of India* for the 20th December:—

The chief difficulty in the way of the development of Indian ores lies in the question of fuel. If fuel suitable for smelting could be found conveniently near the deposits of ore, or if it could be transported at remunerative prices, the matter would be far simpler. The Bengal iron fields have the advantage of the Raniganj coal mines, from one of which, Sanctoria, very fair smelting coke can be made. Its analysis shows over 84 per cent. of carbon, and though 15 per cent. of ash is high, yet the actual impurities are low, sulphur being present to the extent of only a quarter per cent., and phosphorus being practically absent. No other iron field has such advantages in the way of coke, but fuel of sorts is nearly always obtainable at a reasonable cost, and every effort should be made to improve its quality where it is inferior. In a former article we pointed out that the best coal for smelting purposes was found in Raniganj and the Wardha Valley. It may be said roughly that coal should contain at least 60 per cent. of carbon to give good result, and though the Raniganj coal generally is said to contain only some 53 per cent. of carbon on an average, yet the yield of the Kahabari (Hazaribagh) seam runs as high as 78 per cent., while the Pisgaon (Wardha Valley) coal gives an average of 65 per cent. In considering the value of coal for smelting, we must, however, not merely consider its proportion of carbon when dug out of the ground, but its readiness to coke and the percentage of carbon likely to be found in the coke. This especially affects the coal found in the Madras Presidency. Thus the coal found at Beddadanol in the Godaveri Valley showed only 37 per cent. each of carbon and volatile gases, and 26 per cent. of ash, but on coking the volatile gases disappeared, leaving 60 per cent. of carbon and 40 per cent. of ash, thus bringing the coal within the limits we have laid down as remunerative, though we admit that in this instance the ash is excessive. This would not prevent smelting, however, though it would possibly increase the labour of cleaning out the furnaces, if the ash clinkered instead of proving friable, and would certainly require care in tapping the charge into the pigs. Even if a little ash found its way into the pigs at first, that need not seriously interfere with their value, as it could be eliminated in subsequent castings. The Singareni coal shows from 62 to 66 per cent. of carbon, 23 per cent. of volatile gases, and from 11 to 15 per cent. of ash. Assuming that on coking the Singaren coal will act in a manner similar to that of Beddadanol, viz., that all the volatile gases will disappear, and the carbon and ash be increased in the proportion of 23 to 14, we have a result for the poorest yield

of 76 per cent. of carbon in the coke, and 24 per cent. of ash; this is quite good enough to work on, and may be taken as a fair basis for work with the products of this valley. Although the average of Raniganj coal gives only 53 per cent. of carbon, yet there is no reason why excellent smelting should not be done with it, for it contains over 30 per cent. of volatile gases (including moisture), and as this should all disappear in coking, the resultant coke should show 72 per cent. of carbon to 28 per cent. of ash.

The Barakur coal should give even better results, for it has 65 per cent. of carbon in its natural state, which would rise to over 79 per cent. when coked, the balance being ash. It is thus evident that the small proportion of carbon in the original Indian coals is not so serious a matter as might be supposed, on account of the high per centage of volatile gases which would disappear in coking. The effect on the Kahabari coal, which we have already shown is naturally the best for smelting, is to raise the carbon in the coke to from 80 to 84 per cent., while Warora coal, which with only 45 per cent. of carbon appears at first sight unsuitable, contains so much volatile gases and water (40 per cent.) that its coke would contain fully 70 per cent. of carbon. Specimens of coal sent from Kanigorum (in the Waziri Hills) showed about 48 per cent. each of carbon volatile matter, and only 2 per cent. of ash. This if coked would yield 78 per cent. of carbon, but would so greatly increase the ash that it is doubtful whether in this instance it would not be better to use the coal as it stood with a hot blast. Kanigorum coal would not be of much use in iron working on account of the enormous cost of transport, and the figures given being only from small samples are not perhaps good indications of the general value of the coal there. We mention the case, however, to show that even inferior coal may be worked up into serviceable fuel, and may also be found in the most out-of-the-way and unexpected places. We have assumed that the coal would be coked before using to show how even apparently poor fields could be profitably worked. Such coal as that of Kahabari and Singareni would not, however, require such treatment; the proposal is only an alternative one in any case. In our opinion it would pay better to artificially increase the proportion of carbon, and this could be done by adding a certain amount of charcoal to each charge. Charcoal is by far the best fuel for iron smelting, and if it could be obtained cheaply it might be advantageously used at every stage. It is to charcoal that Indian iron must look for its future development, if for no other reason, because the purity and excellence of ore, and in cheap charcoal we must look for the means of starting a great industry. It may mean that each process will be a step in advance of those carried out in Europe, viz., that coal processes have to be carried out with coke, and coke processes with charcoal, but the result will be good. Salem alone seems absolutely devoid of coal, and Salem ore is so good that it would pay to take it to Calcutta and smelt it with Kahabari coal. In fact, the value of fuel within

a reasonable distance, though all important for most ores, becomes less when the quality rises to a very high grade. At the same time, good fuel within reasonable distance would be essential to the full development of the Salem fields, for the ore is far from being the same throughout, varying greatly, and only the best would be worth exporting to Bengal—if that. We are, therefore, compelled to consider the practicability of the use of charcoal throughout all the processes.

The Indian, Steel, Iron, Chrome Company successfully used charcoal during 1833 and succeeding years, and if liberal forest rights were granted by Government, there is no reason why it should not be successfully used again. Good Babool timber fit for charcoal would take about five years or less to arrive at a suitable size. Babool is one of the best, if not the best, firewood obtainable, as it is dense, and gives out great heat. Local timber and junglewoods would, however, probably pay better in the end. The question of mixing charcoal with the coal, thereby raising the percentage of carbon, is one worthy of consideration, though better results would probably be obtained if the charcoal was pounded and then pressed into bricks or slabs, so that its consistency might more closely resemble that of coal. The caking of powdered fuels is not studied as it might be, though it might lead to great results, especially in India. Another fuel that has been hitherto passed over is peat, of which a great deal is available in the Neilgherries. Dr. Percy, in his "Metallurgy," states that it is similar to the peat sold in England, while it is said to be procurable at the bog for eight annas per thousand pounds. It contains, however, a very large proportion of ash, and would probably require to be pulverised, mixed with charcoal dust to raise the percentage of carbon, and pressed into cakes. If this was done locally it would be economically used as fuel. Petroleum, unfortunately, has not yet been discovered in Southern India, so that it would have to be imported if used as a lubricant in pressing cakes of charcoal dust, or charcoal dust and peat, but the cruder and cheaper forms of petroleum would be of great value in this connexion. The whole question of artificial fuel is one that requires more technical treatment than we feel in a position to give it, but it is certainly worth the serious consideration of experts in connexion with the development of the many ores that lie unworked beneath the surface of India. It would be necessary for such experts to fully satisfy themselves as to what really was available in the way of fuel in the different metal-bearing districts of India, and then to see how this material could be best worked up and used in smelting ores. Into the question of fuel in Burmah we have not gone; it is a subject upon which we require much more information than we have at present before we can feel in a position to do the matter justice. Burmah will, we believe, prove to be rich in iron and coal, both appearing in the Chindwin Valley, for instance, in quantities that to the eye of anyone not an expert would appear conclusive proof that both could be remuneratively worked. Scientific and systematic

examination is, however, necessary before the exact value of these fields can be determined. Arakan has long been known for a coal-bearing country, but its fields yield material too poor in carbon for iron smelting, while in the Tenasserim division there are fairly good chances that the Hienlat mines would prove productive at a cost of some Rs. 16 a ton. It is in Upper Burmah, however, that the rich coal fields are supposed to lie, that at Membaloung, in the Shan States, having been declared equal to the best English coal.

XIII.—RAILWAY COMMUNICATION BETWEEN NORTH, CENTRAL, AND SOUTH AMERICA.

The following is an extract from the report of Messrs. Henry G. Davis and Andrew Carnegie, delegates from the United States to the committee on railway communication of the International American Conference held at Washington last year on the subject of railroad communication between the three Americas:—

Examination of the subject of continuous railway communication between South and Central America, Mexico, and the United States is most encouraging. Judged by what has already been accomplished, the task cannot be deemed stupendous. In opening railways between the Atlantic and Pacific Oceans, the United States, Canada, and other countries have performed works of equal or greater magnitude than will probably be required to establish unbroken railway communication with all the Republics south of us.

The building of the Baltimore and Ohio and Pennsylvania Railway over the Alleghany Mountains were greater undertakings than that of an inter-continental railway would be now.

The most difficult portions of a railway to South America will not exceed those of the Mexican Railway from Vera Cruz to the city of Mexico, or those of the Panama Railway across the isthmus.

Much has already been accomplished in the Spanish-American countries in building parts of the proposed through line, which, when combined, will reduce the entire work and distance almost one-half; so that not only can continuous railway communication with those countries be considered feasible, but also that it is on a fair way to be realised. The situation at present stands thus:—

The railways of the United States, from all points east and west, connect with the railways of Mexico upon the border of the two countries at El Paso, 2,456 miles from New York, 1,286 miles from San Francisco, and 1,642 miles from Chicago; at Eagle Pass, 2,083 miles from New York, 1,819 from San Francisco, and 1,380 miles from Chicago; and at Laredo, 2,187 miles from New York and 1,316 miles from Chicago. Hence, to the city of Mexico there are two railway routes: that from El Paso *viâ* the Mexican Central 1,224 miles; that from Laredo *viâ* the Mexican National 839 miles, making the distance from New York *viâ* El Paso 3,680 miles, from San Francisco 2,510 miles and from New York *viâ* Laredo 3,026 miles. A line is in operation 183 miles south of the city of Mexico, and a concession has been granted for its extension 585 miles to the borders of Guatemala. Surveys are being made along the route, and it is believed that the construction will be completed at no distant day. We are informed that a survey is also being made for the connexion of the Mexican line with the city of Guatemala, which

will carry the line 120 miles further south, and leave only 60 miles to reach the northern border of Salvador. In Salvador a line has been projected through that State about 170 miles To carry the line through Honduras in order to reach the nearest point of the Nicaraguan railway system is only about 90 miles, and this system, consisting of two sections of 58 miles and 32 miles in length, can be incorporated into the through line by uniting these two sections by a new line of about 35 miles. Through Honduras, Nicaragua, and Costa Rica, the country is reported of a character very favourable to railway construction.

From the southern terminus of the Nicaraguan system to the boundary of Costa Rica, and through Costa Rica to its railway, of which about 35 miles may be used in the through line, is about 210 miles. It is stated that a syndicate has acquired a concession and will build a line to connect with the railway already constructed. About 75 miles of this may be utilised, thus lessening by so much the distance to be constructed by the through line.

From the southern terminus of the Costa Rica Railway the Atlantic coast may be followed to the northern border of South America, a distance of about 130 miles.

Thus, to carry communication through Central America from the city of Mexico, requires about 1,700 miles of railway, of which 295 miles are already constructed and in operation, about 780 are being constructed and surveyed, leaving 625 miles still to be located.

In the extreme south the railways of the Argentine Republic connect with those of Chili, Uraguay, and Brazil, and extend northward to within 120 miles of the Bolivian frontier and are rapidly being pushed further. Concessions are being granted for the continuation of these lines, or rather for the building of a line to connect with them and with the railways of Bolivia and Peru, which when completed will afford communication as far north as Cuzco in Peru, about 2,190 miles from Buenos Ayres.

Beyond this, northward to the boundary of Central America, little has been done towards an inter-continental line. Should it be located along the central plateau in the heart of the Andes, then a line which has been projected north and south 151 miles in Ecuador might be used, in addition to about 30 miles to be built in Peru near Cerro de Pasco. A French syndicate is also endeavouring to secure a concession in Colombia to build a line from Bogota to Cartagena, and are said to have the capital to construct it; but it may be said that nothing has really been done, and especially so if the inter-continental line should be located on the eastern slopes of the Andes, through that rich but almost unknown country of the head-waters of the Amazon. From Cuzco in Peru to the railways of Costa Rica, about 2,300 miles, is found the one long link which the inter-continental line will be called upon to construct.

From the southern terminus of the railroads now in operation in Mexico to the northern terminus of the Argentine system is

estimated at 4,900 miles. In this distance 230 miles are now in operation which may be utilised in the through line; of the remaining distance about 1,800 miles are already under survey and construction, which when completed will leave about 2,890 miles to be located and constructed in order to complete the line that will eventually unite the Republics of the western hemisphere.

The distance between New York and San Francisco by the shortest mail route is 3,207 miles.

From every point of view it seems clear that immediate steps should be taken to ascertain whether the acquisition of advantages of such transcendent importance as direct and unbroken rail transportation would give to all the Republics of this continent, are really within our reach by any reasonable expenditure, or by the granting of reasonable concessions to capitalists who would undertake the construction and operation of the necessary railway, and give satisfactory security for the fulfilment of their engagement.

XIV.—WOOL INDUSTRY IN THE ARGENTINE REPUBLIC.

The following information respecting the wool industry of the Argentine Republic is extracted from the last report of the United States Consul at Buenos Ayres :—

For many years to come the leading industry of the Argentine Republic must continue to be the raising of sheep and the production of wool. This history of sheep-farming dates back to 1550, when the merinos were introduced from Spain; but it received no attention whatever from the early settlers of the country. Even as late as 1840 sheep were of no value in a commercial point of view. They were allowed the run of the Pampas as a cheap, but not a desirable, article of food. The wool was not worth the expense of carting it to town, and it was often used for litter.

The first great impulse was given to the industry about 35 years ago, when a few Scotch and Irish sheep-farmers, seeing the wonderful possibilities which the Argentine Republic possessed for growing sheep, began to improve the stock by the importation of the finer Negretti and Ram breed.

In 1852 the number of sheep in the entire Republic was 5,500,000; but with the refinement of the wool a foreign market sprang up, and in 1860 the number had increased to 14,000,000. Then followed the American civil war, which caused an unprecedented demand for foreign wool, and sent the price up to fabulous figures. Everybody that could raise money enough to buy a flock of sheep went into the business, and in 1867 the number of sheep was estimated to be 40,072,312. In 1877 it had reached 48,498,688, and in 1888 it was 66,701,097 according to the official estimates. The great seat of the wool industry is the province of Buenos Ayres, the rich succulent grasses of whose boundless Pampas afford natural pasturage to the foot of the Andes; but the other provinces have all a few sheep.

There are also 47,738 llamas in the province of Jujuy employed as beasts of burden, while the number of guanacos, vacunas, and alpacas, as they roam wild over the far Pampas and mountain slopes, cannot be even estimated.

In the province of Buenos Ayres there are 171 sheep per square kilometre, and in the entire Republic 22 per square kilometre. The average weight of ewes is 20 to 25 kilogrammes, and of rams and wethers 30 to 35 kilos.

Tho number of sheep in the Argentine Republic is equal to 17,787 per 1,000 inhabitants.

Value of Sheep.—The value of the sheep in the Argentine Republic is thus stated by Sr. Carrasco, Director of the Census: native sheep, 36,067,750 dols.; mixed breeds, 104,846,082; pure blood, 6,319,870; total, 147,233,702.

Condition of the Industry.—It would seem from the foregoing figures that the sheep industry of this country is not quite so flourishing as it was a few years ago. Relatively, since the agricultural resources began their development, it is not so important as it has been; but it is not possible to say if there has been any retrograde, as the returns of sheep are only based on estimates and calculations, and every person who undertakes to publish statistics makes use of such figures as he may have at hand. While the industry may not actually be on the decline, there are several reasons which would indicate that there is a temporary decrease in the actual number. In the first place, the losses from floods, foot-rot, and starvation for the last two or three years are estimated by many millions; and in the second place, there is now a steady market in Europe for mutton carcases. But even so, the Argentine Republic has a larger number of sheep than any other country in the world, Australia following with 58,052,180, and the United States with 48,332,331.

The wool clip of the country bears a small proportion to the number of sheep. In 1886 the number of sheep amounted to 69,000,000, and the total wool clip was 261,000,000 lbs.

From this it will be seen that the yield is 3·8 lbs. of "dirty," or unwashed wool; and by being always thus shipped in the grease, River Plate wool suffers more from shrinkage than either Australia or Cape Town, as the net results are as follows:—

Country.	Shrinkage.	Net Yield.	Net Wool.
	Lbs.	Lbs.	Lbs.
Argentine Republic - - -	65	35	91,000,000
Australia - - - -	44	50	220,000,000
Cape Colony - - - -	30	70	36,000,000

Value of Annual Yield.—In regard to the value of wool clip, including fleeces and sheep-skins, there is no way of reaching it except by taking the tables of exports. The following are the figures of the last 10 years:—

Year.	Wool.		Sheep-Skins.	
	Quantity.	Value.	Quantity.	Value.
	Tons.	Dollars.	Tons.	Dollars.
1881	103,876	31,446,495	32,339	4,639,437
1882	111,009	29,978,960	22,353	4,231,718
1883	118,403	29,660,918	26,564	5,035,886
1884	114,344	32,005,819	24,938	5,484,952
1885	128,393	35,950,111	31,336	6,267,377
1886	132,130	31,711,604	35,312	6,350,731
1887	109,164	52,749,315	30,447	6,698,408
1888	131,743	44,858,606	28,054	5,610,923
1889	141,769	56,709,774	36,376	11,386,593
1890 (9 months)	102,550	70,447,903	18,522	9,426,559

It is necessary to mention that the values for the last four years are stated in paper currency.

To what Countries Exported.—The countries to which the wool clip of 1889 was exported will appear from the following table :—

Country.	Wool (Unwashed).		Sheep-Skins.	
	Quantity.	Value.	Quantity.	Value.
	Tons.	Dollars.	Tons.	Dollars.
Germany - -	34,295	13,718,318	1,240	388,176
Belgium - -	30,578	12,231,472	1,114	348,718
Brazil - - -	11	4,424	—	—
Spain - -	11	4,713	53	16,604
United States - -	5,106	2,042,506	—	—
France - -	61,244	24,497,670	27,715	8,674,931
Italy - - -	1,615	646,269	3,010	942,305
Holland - -	14	5,952	—	—
Portugal - -	21	8,462	—	—
Great Britain - -	4,796	1,918,426	2,014	630,477
Uruguay - -	1,672	668,884	943	295,268
Undistinguished -	2,406	962,678	287	90,114
	141,769	56,709,774	36,376	11,386,593

The wool included in the foregoing returns was all fine clothing varieties, except that which was shipped to the United States. The latter was carpet wool, raised from "criolla" sheep in the upper provinces, and shipped from the port of Rosario to Boston.

The Future of Argentine Wool.—There is no doubt that sheep-growing, along with the cattle business, must continue to be one of the leading industries of the Argentine Republic. Its development can be indefinitely extended. There are millions of acres all through the vast interior and running along the Andes away down to the extreme limits of Patagonia, which, whatever else may be said of the country, can be used for sheep and cattle pasturage; and as the inside lands become too valuable for sheep and cattle ranges, but must be employed for farming purposes, these outside "camps" will come into requisition for pasturage. Already, with the progress of agriculture, the sheep and cattle are moving farther and farther out, and, with the development of the country, we may ultimately expect all the vast extent of Pampa, now beyond the reach of railways or markets, filled with sheep and cattle *estancias*. Whatever may be the fate of wool and wool-growing in other countries, here it is safe for all time to come.

XV.—PROCEEDINGS AND DELIBERATIONS OF THE CHAMBERS OF COMMERCE OF THE UNITED KINGDOM.

Bradford.—The monthly meeting of the council of the Bradford Chamber of Commerce was held on the 28th January, Mr. J. McLaren in the chair. In the course of the proceedings Sir Henry Mitchell, who was appointed senior vice-president of the Chamber, said he should be very glad indeed to support the president, in every way in his power, in his efforts in maintaining the position of the Chamber. It was quite true that there were some differences of opinion amongst them on some important questions just now. He regretted that he was not able to be present at the Chamber of Commerce soirée, for if he had been there it would have been his duty to reply to what he thought were the somewhat unjust criticisms passed upon that Chamber and its resolutions in regard to the French tariff. He thought it was due to the majority of the members of that Chamber to say that in view of the expiration of the French treaty early next year, and of the frightful effects which these constant impositions of higher duties had upon English trade, it was their duty to do all that they could to prevent the imposition of higher tariffs upon their goods. There was only one thing that could be done beyond the mere sending of remonstrances, and that was to appeal to the largest and most important industry in France, the wine industry, in order that those engaged in that industry might render what help they could in preventing the new French Tariff Bill from coming into operation. He had reason to believe that the action taken by the Bradford Chamber had had a tendency to stimulate these people to do everything in their power to prevent the imposition of the higher duties. One very remarkable statement was made by Mr. Swire Smith at that soirée, and his attention had been called to it by many gentlemen in this district. This was that the export trade from Bradford was now four times as great as it was 10 years ago. Mr. Smith had, however, since corrected that by saying that his observation only applied to the exports to America. He (Sir Henry) had carefully gone through the figures relating to the exports from Bradford to America for the last 20 years—and it was not desirable to take single years and compare them, because some years were so very much better than others were—and had found that from 1871 to 1880 the average exports of worsted goods were 2,254,000*l.* per year, and that the average for the years 1881 to 1890 was 2,265,000*l.*, so that there was practically no difference between the two periods. They must also bear in mind that during the more recent period all their worsted coatings had figured in that amount. That meant that

there had been a new industry nearly approaching 1,000,000*l.* a year of exports to America to make up for the enormous deficiency which had taken place in the exportation of worsted stuff fabrics; and, further, they must bear in mind that the population of America had increased by nearly 20,000,000. He hoped they would excuse him for referring to that matter just at that time; he thought he owed it as a duty to the large majority of the members of that council to give some reply to the very unfair statements that were made. He believed they were all very earnest free-traders; he was perhaps more earnest than some of his friends were, and he desired that every possible obstruction to trade should be removed.

Bristol.—At the monthly meeting of the council of the Bristol Chamber of Commerce, held on the 28th January, Mr. Dove Willcox (president) in the chair, it was resolved to write certain members of the Chamber requesting them to prepare reviews of the trade of Bristol and district during the year 1890 on shipping, shipbuilding, iron, chemicals, wines and spirits, leather tanning, tobacco, rope and hemp, cattle, coal, boots and shoes, timber, provisions, petroleum, grain, and sugar.

The president reported that the chairmen of the various committees of the Chamber had considered the summaries and examples of estimated losses by the Midland and Great Western companies, which they allege would be caused by the adoption of the Board of Trade schedules, and that the committee report that in the case of each company the names of the stations between which the rates would be reduced are scrupulously kept in the background, so that there is no opportunity for checking the accuracy of the calculations made, but the committee are satisfied that on investigation it would be found that these estimates are based on rates which, because of the absence of competition, have been framed on a very high if not an exorbitant scale. The committe suggests that a communication be addressed by the council to the Board of Trade setting forth this view of the matter, and suggesting that in all probability the abolition of preferential rates under the Railway and Canal Traffic Act, which has to the knowlege of the committee already resulted in greatly increased rates on various routes, has likewise, to a considerable extent, operated as an equivalent to the prospective losses which the companies apprehend under the operation of the proposals of the Board of Trade in classification and maximum rates; and it was resolved to comply with the recommendation of the committee.

Dublin.—A meeting of the council of the Dublin Chamber of Commerce was held on the 19th January, Mr. J. L. Blood in the chair. The following letter from the Board of Trade was before the council, and orders were given that the request of the Board of Trade should be complied with as far as practicable—

Board of Trade (Commercial
Department), London, S.W.,
12th January 1891.

SIR,

I AM directed by the Board of Trade to state that they would be much obliged if the council of your Chamber would cause to be collected and forwarded to this office as soon as convenient copies of any annual trade circulars or reviews issued by members of the Chamber giving an account of the state of trade in your district during 1890. The Board would also be glad to receive from time to time copies of any monthly or other periodical circulars that may be issued in future by members of the Chamber, as well as any annual report which the Chamber itself may publish.

I am, &c.,
(Signed) R. GIFFEN.

The Secretary,
Chamber of Commerce, Dublin.

Manchester.—A monthly meeting of the Board of the Directors of the Manchester Chamber of Commerce was held on the 21st January, Mr. Henry Lee in the chair. The president stated that the report of the Chamber upon the French Customs Tariff Bill prepared by the several committees to which different sections of the work had been allotted, had been forwarded to the Trade and Treaties Committee. The description of goods covered by the Manchester Chamber's report were cotton yarns, cotton tissues, and small wares, chemicals, machinery and metals, and hat manufactures. In a letter received from the Foreign Office, it was stated that a Merchandise Marks Bill had been prepared by the Government of Bulgaria, but that the exigencies of the parliamentary session of the National Assembly had not permitted of its presentation, and that it would have to stand over until next year.

In a further letter received from the Foreign Office, it was announced that by an official decree giving effect to a law passed by the Chilian Chamber of Deputies in August last, ordering the removal of the surtax on the duties levied upon importations of cheap hemp and cotton goods (excepting printed calicoes) suitable for the consumption of the poorer classes in Chili, the surtax would be discontinued from the 1st January. The surtax was an extra duty established when Chilian exchange began to fall, and was in fact an attempt to remedy the difference in exchange. The effect of the suppression of the surtax is that plain grey and bleached cotton goods will now be admitted into Chili at a reduction of duty amounting to about 25 per cent., cotton goods paying hitherto 4 c. per yard, for example, being charged henceforth only 3 c. per yard.

Morley.—A meeting of the Morley Chamber of Commerce was held on the 5th January, Mr. E. F. Scholes in the chair. The minutes of the last meeting were read and confirmed, after which the president reported upon a conference on French tariffs,

recently held in Leeds. A discussion took place on the advisability of recommending the Government to put a duty on French wines and spirits with a view to obtaining a better treaty with France. Mr. B. P. Hepworth moved "That in case a treaty " equally favourable to this country as the existing conventional " tariff cannot be negotiated with France, it is, in the opinion of " this Chamber, desirable to reserve full liberty of action as " regards the wine and spirit duties." The president seconded the motion. As an amendment, Mr. Josiah Rhodes moved, "That this Chamber recommends the Government to endeavour " to make as good or better treaty with France than the present " one; but otherwise, not to make any treaty at all." The amendment was seconded, and, on a division, was carried. The president was appointed a member of the deputation of representatives of Chambers of Commerce to wait upon Lord Salisbury on the subject of the French tariff.

Walsall.—A meeting of the Walsall and District Chamber of Commerce was held on the 28th January, Mr. Lavender in the chair. Among other questions considered were railway rates, the Arbitration Board, local railway accomodation, and railway strikes.

XVI.—RECENT TRADE BLUE BOOKS.

1. *Tramways (Street and Road). Return of Street and Road Tramways authorised by Parliament, showing the amount of Capital authorised, Paid up and Expended, the Length of Tramway authorised, and the Length open for the Public Conveyance of Passengers, down to the 30th day of June 1890; the Gross Receipts, Working Expenditure and Net Receipts; the Number of Passengers conveyed, and the Number of Miles run by Cars during the Year ended the 30th day of June 1890; together with the Number of Horses, Engines, and Cars at that date. (In continuation of Parliamentary Paper, No. 238, Session 1889.)* 282. *Price 3d.*

This is the annual return issued by the Board of Trade for the year ending the 30th of June 1890. It shows that the total paid-up capital on the 30th of June 1890 was 13,502,026*l.*, as compared with a total of 13,556,963*l.*, at the same date in 1889.* The total length of line open in 1890 was 948 miles, as compared with a total of 949 miles in 1889. The total number of passengers carried in 1890 was 526,369,328, as compared with 477,596,268 in 1889. The gross receipts were 3,214,743*l.*, against 2,980,224*l.* in 1889, the working expenses 2,402,800*l.* in 1890, and 2,266,681*l.* in 1889; and the net receipts amounted to 811,943*l.* in 1890 and to 713,543*l.* in 1889.

2. *Fifty-second Annual Report of the Registrar-General of Births, Deaths, and Marriages in England* (1889). *(C.—6170.) Price 1s. 3d.*

In submitting his report for the year 1889, dated 29th November 1890, to the President of the Local Government Board, the Registrar-General says that the population of England and Wales, as enumerated in April 1881, consisted of 25,974,439 persons. The natural increase, or the excess of births over deaths from that date to the middle of 1889 amounted to 3,067,314; so that the population at the later date, could its growth be determined simply by the balance between births and deaths, would have been 29,041,753. Emigration and immigration cannot, however be disregarded in an estimate of the population; and, in the absence of sufficiently full information on these points, the estimated populations published in the annual reports are based on the assumption that the rate of increase which prevailed in the last intercensal period has since been maintained, a method which it has been shown is not likely to lead to serious error when so large an area as the entire country is dealt with.

* The figures relating to capital for the year 1889 were considerably affected by the transfer of old undertakings to new companies with reduced capital, and by certain other re-arrangements of capital; and the results for 1890 have been further affected by the new proprietors of certain other undertakings neglecting to furnish returns.

The population thus estimated in the middle of the year 1889 was 29,015,613, consisting of 14,119,824 males and 14,895,789 females. It is on this estimated population that the rates in the report have been calculated.

The number of marriages registered in the year 1889 was 213,865, corresponding to a rate of 14·7 persons married per 1,000 living. This is a higher rate than that in any year since 1884, when it was 15·0, declining to 14·4 in the following year, and to 14·1, the lowest on record, in 1886; while both in 1887 and 1888 the rate was 14·2.

The births registered in the year numbered 885,944, and were in the proportion of 30·5 to 1,000 persons living. This is the lowest birth-rate recorded in any of the last 50 years, and a further step in the decline which has gone on continuously since 1876, when the birth-rate was 36·3, and at its maximum.

The deaths registered in the year numbered 518,353, and were in proportion of 17·9 to 1,000 of the estimated population. In the next preceding year the proportion had been 17·8, and these two rates are by far the lowest as yet recorded, the next lowest having, moreover, been that of the immediately preceding year 1887, when the rate was 18·8. In each of the nine years of the current decennium the recorded rate has been under 20·0, whereas in no previous year had it ever fallen so low as that point.

3. *Railway Servants* (*Hours of Labour*). *Return in pursuance of Section* 4 *of the Regulation of Railways Act,* 1889, *of Certain Classes of Weekly-paid Servants who were during the Months of September* 1889 *and March* 1890 *on Duty on the Railways of the United Kingdom for more than Twelve Hours at a time; or who, after being on Duty more than Twelve Hours, were allowed to resume Work with less than Eight Hours' Rest.* (*C.*—6158.) *Price* 5½*d.*

This is the first issue of the above return under section 4 of the above Act. It has been prepared under the direction of the Board of Trade, and shows the details as directed by the Act for each railway separately in the United Kingdom, the information distinguishing the various classes of railway servants, and being given for the months of September 1889 and March 1890.

4. *Agricultural Statistics* (*Ireland*). *Tables showing the Extent in Statute Acres and the Produce of the Crops, for the Year* 1890, *with Observations of the District Inspectors of the Royal Irish Constabulary and of the Sergeants of the Metropolitan Police who acted as Superintendents of the Agricultural Statistics; together with Tables showing the Average Yearly Extent under the Principal Crops, and the Average Produce thereof, in the Ten Years* 1880–89; *also Bee-keeping Statistics for the Season* 1889. (*C.*—6174.) *Price* 4½*d.*

This is the annual report of the Registrar-General for Ireland, and is issued in anticipation of the more detailed report on the

agricultural statistics of the country. The Registrar states that the acreage under crops in 1890 compared with 1889 shows, in cereal crops, an increase in wheat of 2,596 acres, while oats exhibits a decrease of 17,939 acres, barley of 3,725 acres, rye of 1,213 acres, and bere of 92 acres. In green crops—potatoes decreased by 6,433 acres, and turnips by 2,527 acres, but there is an increase of 2,436 acres in mangel wurzel. In other crops—flax decreased by 16,756 acres; meadow on clover, sainfoin, and grasses under rotation decreased by 38,424 acres, and meadow on permanent pasture or grass not broken up in rotation, by 55,464 acres. Compared with the average acreage for the ten years 1880–89, there is a decrease in all the chief crops except rye, mangel wurzel, and hay; rye increased by 4,939 acres, mangel wurzel by 6,332, and hay by 48,677 acres. Wheat shows a decrease of 9,105 acres, oats a decrease of 117,848 acres, and barley a decrease of 2,475 acres. Potatoes have decreased by 29,715 acres, turnips by 3,753 acres, and flax by 22,796 acres.

The yield per acre of cereal crops in 1890, compared with 1889, exhibits a decrease in wheat and barley of 0·7 cwt., and in rye of 1·3 cwt., while there is an increase in oats of 0·4 cwt., and in bere of 0·5 cwt. In other crops—potatoes show a decrease of 1·3 tons; while there is an increase in turnips of 1·3 tons, in mangel wurzel of 0·2 ton, and in flax of 6·1 stones. Hay on clover, sainfoin, and grasses under rotation exhibits a decrease of 0·1 ton, and hay on permanent pasture or grass not broken up in rotation shows the same rate in both years. The rates for 1890, compared with the average rates for the ten years 1880–89, show for cereal crops an increase in wheat of 0·7 cwt., in oats of 1·0 cwt., and in barley of 1·3 cwt., and a decrease in rye of 0·2 cwt., and in bere of 0·3 cwt. In other crops there is a decrease in potatoes of 1·4 tons while there is an increase in turnips of 2·1 tons, in mangel wurzel of 1·2 tons, in flax of 5·7 stones, and in hay of 0·2 ton.

The produce in 1890, as compared with 1889, shows, in cereal crops, an increase in oats of 163,667 cwt., while there is a decrease in wheat of 22,199 cwt., in barley of 185,265 cwt., and in rye of 34,305 cwt. Potatoes show the large decrease of 1,037,193 tons, while turnips increased by 344,888 tons, and mangel wurzel by 41,442 tons. There is an increase of 835 tons in flax, and a decrease of 120,335 tons in hay on clover, sainfoin, and grasses under rotation, and of 139,676 tons in hay on permanent pasture or grass not broken up in rotation.

The produce in 1890, as compared with the average produce of the ten years, 1880–89, shows, in cereal crops, a decrease in wheat of 67,648 cwt.: in oats of 347,059 cwt.; and in bere of 156 cwt.; and an increase in barley of 187,851 cwt., and in rye of 55,552 cwt. In other crops in 1890, as compared with the average, there is a decrease of 1,158,508 tons in potatoes, while there is an increase of 571,208 tons in turnips, of 135,444 tons in mangel wurzel, and of 406,091 tons in hay. Flax exhibits a decrease of 546 tons.

5. *Pauperism* (*England and Wales*). *Return* (*A.*). *Comparative Statement of Pauperism, November* 1890. 94 (*A. X.*). *Price* 2*d.*

This is the usual monthly statement issued by the Local Government Board. It shows that the number of persons (excluding lunatics in asylums and licensed houses, and vagrants) relieved in England and Wales on the last day in each week of the month of November was as follows :—First week, 664,966 ; second week, 668,406 ; third week, 670,974 : fourth week, 675,999. The number of paupers in receipt of relief in November 1890 was smaller than the number relieved in the corresponding month in 31 out of the 33 preceding years.

XVII.—STATISTICAL TABLES.

I.—Foreign Trade of the United Kingdom.

Statement of the Imports into and of the Exports from the United Kingdom during the month ended 31st January 1891, compared with the corresponding month of the year 1890.

Month ended 31st January.

I. Imports from Foreign Countries and British Possessions.

	Month ending 31st January.		Increase.	Decrease.
	1891.	1890.		
	£	£	£	£
I. Animals living (for food)	641,439	593,771	45,668	—
II. (A.) Articles of food and drink, duty free	9,409,912	10,335,301	—	925,389
(B.) Articles of food and drink, dutiable	1,929,851	2,257,001	—	327,170
Tobacco, dutiable	258,461	344,689	—	86,228
III. Metals	1,715,867	2,085,063	—	369,196
IV. Chemicals, dyestuffs, and tanning substances	852,787	810,293	42,494	—
V. Oils	636,434	601,519	34,915	—
VI. Raw materials for textile manufactures	10,443,376	11,923,168	—	1,479,792
VII. Raw materials for sundry industries and manufactures	2,378,863	2,651,310	—	272,447
VIII. Manufactured articles	4,286,634	4,948,308	—	661,674
IX. (A.) Miscellaneous articles	1,124,269	1,535,884	—	411,615
(B.) Parcel post	63,209	55,543	7,666	—
Total Value	33,741,082	38,143,850	—	4,402,768

II. Exports of British and Irish Produce and Manufacture.

	£	£	£	£
I. Animals living	20,937	53,959	—	33,022
II. Articles of food and drink	726,751	832,784	—	106,033
III. Raw materials	1,419,699	1,529,677	—	109,978
IV. Articles manufactured and partly manufactured, viz.:—				
(A.) Yarns and textile fabrics	9,284,096	9,853,489	—	569,393
(B.) Metals and articles manufactured therefrom (except machinery)	3,148,601	3,577,155	—	428,554
(C.) Machinery and millwork	1,106,326	1,352,223	—	245,897
(D.) Apparel and articles of personal use	995,440	1,035,116	—	39,676
(E.) Chemicals and chemical and medicinal preparations	710,457	689,818	20,639	—
(F.) All other articles, either manufactured or partly manufactured	2,348,858	2,573,383	—	224,525
(G.) Parcel post	73,150	89,148	—	15,998
Total Value	19,834,315	21,586,752	—	1,752,437

III. Exports of Foreign and Colonial Produce.

	£	£	£	£
Total Value (partly estimated)	4,389,802	4,779,951	—	390,149

II.—Corn Prices.

Return of the Quantities sold and Average Prices of British Corn, Imperial Measure, as received from the Inspectors and Officers of Excise during the under-mentioned periods.

Periods.	Wheat.	Barley.	Oats.
	Quantities sold.		
	Qrs. bus.	Qrs. bus.	Qrs. bus.
Week ended 3rd January 1891	37,659 0	53,882 4	11,371 4
„ 10th „ „	65,424 6	112,051 4	16,676 2
„ 17th „ „	97,963 5	138,889 1	18,724 7
„ 24th „ „	106,196 0	140,911 6	21,364 5
„ 31st „ „	103,416 3	140,842 7	20,846 7
January 1891	410,659 6	586,577 6	88,984 1
Corresponding month in 1890	*243,555 4*	*407,611 3*	*56,053 0*
„ *1889*	*188,841 4*	*363,708 6*	*31,642 2*
	Average Prices.		
	s. d.	*s. d.*	*s. d.*
Week ended 3rd January 1891	32 7	28 5	17 9
„ 10th „ „	32 8	28 5	17 6
„ 17th „ „	32 9	28 6	17 9
„ 24th „ „	32 11	28 6	18 0
„ 31st „ „	32 8	28 10	18 0
January 1891	32 8	28 6	17 9
December 1890	*32 3*	*28 6*	*17 9*
November „	*32 3*	*29 2*	*17 5*
October „	*30 11*	*29 6*	*17 4*
September „	*32 11*	*30 2*	*18 3*
August „	*36 1*	*26 1*	*20 0*
July „	*33 8*	*24 1*	*19 7*
June „	*32 8*	*25 4*	*19 9*
May „	*32 8*	*28 1*	*19 4*
April „	*29 10*	*29 8*	*18 4*
March „	*29 9*	*30 6*	*18 6*
February „	*29 9*	*31 8*	*18 6*
January 1890	*30 1*	*31 6*	*18 4*
„ *1889*	*30 2*	*26 9*	*16 4*
„ *1888*	*31 1*	*30 3*	*15 11*
„ *1887*	*35 8*	*26 6*	*17 1*

III.—Emigration.—January 1891.

Return of the Numbers, Nationalities, and Destinations of the Passengers that left the United Kingdom for Places out of Europe during the Month ended 31st January 1891, compared with the corresponding Period of the previous Year.

Nationalities.	United States.	British North America.	Australasia.	Cape of Good Hope and Natal.	All other Places.	Total.
	Month ended 31st January 1891.					
English	3,161	247	1,080	566	792	5,846
Scotch	444	27	262	49	135	917
Irish	648	35	247	18	111	1,059
Total of British origin	4,253	309	1,589	633	1,038	7,822
Foreigners	2,547	89	34	92	127	2,889
Nationalities not distinguished	—	—	—	—	303	303
Total	6,800	398	1,623	725	1,468	11,014
	Month ended 31st January 1890.					
English	3,089	348	1,346	1,040	924	6,747
Scotch	413	21	133	67	60	696
Irish	571	43	98	20	30	762
Total of British origin	4,073	412	1,577	1,127	1,014	8,205
Foreigners	1,542	84	25	135	107	1,893
Nationalities not distinguished	—	—	—	1	284	285
Total	5,617	496	1,602	1,263	1,405	10,383

Note.—The above figures, being made up at the earliest possible date after the close of each month, are subject to correction in the Annual Returns.

IV.—Bankruptcy.—England and Wales.

Number of Receiving Orders Gazetted in the under-mentioned Periods and in the under-mentioned Principal Trades and Occupations.

	January	
	1891.	1890.
Total gazetted	No. 346	No. 380
Number gazetted in principal trades and occupations:—		
Builders	22	24
Grocers, &c.	20	21
Publicans and hotel keepers, &c.	20	24
Boot and shoe manufacturers and dealers	15	6
Farmers	12	16
Butchers	11	8
Decorators, painters, plumbers, &c.	11	5
Bakers	10	17
Agents, commission and general	10	3
Carpenters and joiners	7	8
Cabinet-makers and upholsterers	7	2
Drapers, haberdashers, &c.	6	8
Clerks, commercial and general	6	9
Merchants	6	6
Auctioneers	5	2
Chemists, druggists, and chemical manufacturers	5	2
Tailors, &c.	4	5
Provision merchants, &c.	4	5
Fishmongers, poulterers, &c.	4	7
Corn, flour, seed, hay, and straw merchants and dealers	4	2
Engineers and founders, &c.	4	—
Coal and coke merchants and dealers	4	2
Greengrocers, fruiterers, &c.	3	5
Furniture dealers and makers	3	3
Confectioners	3	1
Carriage, &c. builders	3	3
Dairymen, cowkeepers, &c.	3	3
Curriers, tanners, and leather merchants	3	1
Brewers and beer merchants	3	3
Bicycle and tricycle manufacturers	3	—
Jewellers, watchmakers, importers, silversmiths, &c.	2	1
Clothiers, outfitters, &c.	2	7
Travellers, commercial, &c.	2	5
Lodging-house keepers	2	7
Milliners, dressmakers, &c.	2	1
Millers	2	1
Gardeners, florists, &c.	2	2
Stone, marble, and monumental masons	2	6
Brokers, stock and share	2	—
Oil and colour merchants	2	1
Surgeons	2	2
Clerks in holy orders	2	3
Schoolmasters and schoolmistresses	2	—
Cattle and pig dealers	2	—

	January	
	1891.	*1890.*
Number gazetted in principal trades and occupations —*cont.*	No.	*No.*
Engineers, civil	2	*2*
Glass and lead manufacturers and merchants, &c.	2	*2*
Solicitors	1	*4*
Tobacconists, &c.	1	*1*
Ironmongers	1	*4*
Blacksmiths, farriers, &c.	1	*6*
Printers and publishers	1	*3*
General dealers	1	*3*
Carriers, carmen, lightermen, and hauliers	1	*4*
Saddlers and harness makers	1	*2*
Officers in Army	1	*3*
Wheelwrights	1	*2*
Wine and spirit merchants, &c.	1	*1*
Architects and surveyors	1	*1*
Restaurant, coffee, and eating-house keepers	1	*1*
Aërated and mineral water manufacturers	1	*2*
Hairdressers	1	*1*
Bricklayers, plasterers, &c.	1	*1*
Timber merchants and wood dealers	—	*4*
Stationers	—	*2*
Gardeners, market	—	*2*
Fishing net, smack owners, and masters	—	*5*
Accountants	—	*2*
Tea merchants	—	*2*

V.—Export of Live Animals from Ireland to Great Britain.

Return of the Number of Animals exported from Ireland to Great Britain during the Month ended 31st January 1891, compared with the corresponding Month of the Year 1890.

Animals.	January	
	1891.	*1890.*
	No.	*No.*
Cattle	36,801	*34,858*
Sheep	12,841	*13,729*
Swine	79,336	*64,071*
Goats	15	*8*
Horses	1,192	*1,564*
Mules or Jennets	—	—
Asses	2	*3*
Total	130,187	*114,033*

VI.—Fishery Statistics.—England and Wales.

Statement of the Total Quantity and Value of the Fish returned as landed on the English and Welsh Coasts from the fishing grounds during the Month of January 1891, and the corresponding Month of the previous Year.

——	East Coast.	South Coast.	West Coast.	Total.	*Corresponding Month of the previous Year.*
	Quantity.				
	Cwts.	Cwts.	Cwts.	Cwts.	*Cwts.*
Brill	1,504	256	84	1,844	*1,313*
Soles	7,868	1,315	918	10,101	*4,762*
Turbot	3,914	488	589	4,991	*3,745*
Prime fish, not separately distinguished	2,220	1,477	—	3,697	*2,893*
Total prime fish	15,506	3,536	1,591	20,633	*12,713*
Cod	25,675	988	3,438	30,101	*24,193*
Haddock	161,380	4	1,408	162,792	*145,756*
Hake	540	1,238	3,840	5,618	*
Halibut	1,593	—	1	1,594	*2,532*
Herrings	683	14,781	13,048	28,512	*8,531*
Ling	5,384	242	2,459	8,085	*6,802*
Mackerel	—	1,369	4	1,373	*23*
Pilchards	—	4,412	—	4,412	*12,476*
Plaice	38,483	4,603	1,950	45,036	*37,491*
Sprats	52,194	3,332	—	55,526	*18,511*
All other, except shell fish	45,380	15,362	11,520	72,262	*94,841*
Total	346,818	49,867	39,259	435,944	*363,101*
Shell fish:—	No.	No.	No.	No.	*No.*
Crabs	32,370	6,799	970	40,139	*23,629*
Lobsters	—	8,282	474	8,756	*4,719*
Oysters	3,455,000	436,000	74,000	3,965,000	*4,370,000*
	Cwts.	Cwts.	Cwts.	Cwts.	*Cwts.*
Other shell fish	35,781	5,270	10,510	51,561	*43,204*
	Value.				
	£	£	£	£	£
Brill	3,678	536	190	4,404	*2,776*
Soles	37,777	8,146	4,619	50,542	*35,335*
Turbot	17,216	1,708	2,285	21,209	*15,467*
Prime fish, not separately distinguished	5,111	6,321	—	11,432	*9,011*
Total prime fish	63,782	16,711	7,094	87,587	*62,588*
Cod	19,250	656	2,443	22,349	*17,493*
Haddock	103,814	2	1,011	104,827	*79,280*
Hake	416	1,179	3,451	5,046	*
Halibut	4,502	—	4	4,506	*5,036*
Herrings	395	6,984	6,120	13,499	*5,795*
Ling	3,820	205	2,225	6,250	*4,935*
Mackerel	—	1,652	3	1,655	*115*
Pilchards	—	1,124	—	1,124	*2,373*
Plaice	44,541	5,087	2,134	51,762	*40,855*
Sprats	4,393	1,178	—	5,571	*3,059*
All other, except shell fish	28,955	9,022	7,536	45,513	*69,896*
Total	273,868	43,800	32,021	349,689	*298,250*
Shell fish:—					
Crabs	171	209	7	387	*377*
Lobsters	—	332	15	347	*87*
Oysters	13,140	946	217	14,303	*14,355*
Other shell fish	5,213	1,919	1,982	9,114	*8,043*
Total	18,524	3,406	2,221	24,151	*22,762*
Total value of fish landed	292,392	47,206	34,242	373,840	*315,012*

Note.—The above figures are subject to correction in the Annual Returns. The values given are the actual values returned by the local officers at each place.

* Not distinguished previous to January 1st, 1891.

VII.—Fishery Statistics.—Scotland.

Statement of the Total Quantity and Value of the Fish returned as landed on the Scotch Coasts during the Month of January 1891, and the corresponding Month of the previous Year.

—	East Coast.	Orkney and Shetland.	West Coast.	Total.	*Corresponding Month of the previous Year.*
	Quantity.				
	Cwts.	Cwts.	Cwts.	Cwts.	*Cwts.*
Soles (Lemon Soles)	795	—	7	802	*637*
Turbot	346	—	39	385	*344*
Cod	36,641	2,678	4,109	43,428	*38,466*
Eel	237	6	702	945	*1,368*
Flounder, Plaice, Brill	5,616	—	1,411	7,027	*6,404*
Haddock	100,430	5,535	5,012	110,977	*109,347*
Halibut	143	55	57	255	*286*
Herrings	32,039	482	26,374	58,895	*34,432*
Ling	3,677	1,028	1,907	6,612	*5,724*
Mackerel	—	—	—	—	—
Saith (Coal Fish)	1,992	168	1,630	3,790	*2,526*
Skate	3,431	59	707	4,197	*3,696*
Sparling	60	—	1	61	*8*
Sprats	301	—	—	301	*951*
Torsk (Tusk)	1	3	10	14	*13*
Whiting	6,499	—	774	7,273	*6,173*
All other, except shell fish	10,153	4,690	458	15,301	*9,767*
Total	202,361	14,704	43,198	260,263	*219,542*
Shell fish:—	No.	No.	No.	No.	*No.*
Crabs	56,815	—	4,400	61,215	*55,040*
Lobsters	3,455	1,206	21,795	26,450	*25,387*
Oysters	5,300	—	42,000	47,300	*38,500*
	Cwts.	Cwts.	Cwts.	Cwts.	*Cwts.*
Clams	5,576	—	4	5,580	*2,781*
Mussels	13,796	500	4,746	19,042	*16,331*
Other shell fish	2,720	113	1,090	3,923	*3,517*
	Value.				
	£	£	£	£	£
Soles (Lemon Soles)	1,636	—	11	1,647	*1,400*
Turbot	1,448	—	39	1,487	*1,567*
Cod	19,138	636	1,737	21,511	*17,875*
Eel	151	6	333	490	*744*
Flounder, Plaice, Brill	5,289	—	1,005	6,294	*5,877*
Haddock	48,532	1,374	2,150	52,056	*48,978*
Halibut	259	60	44	363	*427*
Herrings	11,505	78	7,360	18,943	*13,873*
Ling	2,038	244	655	2,937	*2,542*
Mackerel	—	—	—	—	—
Saith (Coal Fish)	361	22	211	594	*518*
Skate	998	16	139	1,153	*1,109*
Sparling	338	—	6	344	*25*
Sprats	38	—	—	38	*58*
Torsk (Tusk)	1	1	2	4	*2*
Whiting	2,563	—	548	3,111	*2,591*
All other, except shell fish	2,089	119	134	2,342	*1,899*
Total	96,384	2,556	14,374	113,314	*99,455*
Shell fish:—					
Crabs	342	—	20	362	*290*
Lobsters	207	102	1,040	1,349	*1,252*
Oysters	32	—	192	224	*178*
Clams	472	—	1	473	*440*
Mussels	857	25	211	1,093	*1,005*
Other shell fish	400	17	239	656	*543*
Total	2,310	144	1,703	4,157	*3,668*
Total value of fish landed	98,694	2,700	16,077	117,471	*103,123*

Note.—The above figures are subject to correction in the Annual Returns.

VIII.—Fishery Statistics.—Ireland.

Statement of the Total Quantity and Value of the Fish returned as landed on the Irish Coasts during the Month of January 1891, and the corresponding Month of the previous Year.

——	North Coast.	East Coast.	South Coast.	West Coast.	Total.	*Corresponding Month of the previous Year.*
	Quantity.					
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	*Cwts.*
Soles	—	117	28	52	197	*199*
Turbot	—	42	23	31	96	*85*
Total prime fish	—	159	51	83	293	*276*
Cod	250	3,214	463	2,002	5,929	*3,266*
Haddock	228	1,987	206	429	2,910	*1,530*
Hake	—	260	18	—	278	*206*
Herrings	46	23	173	403	645	*360*
Ling	87	168	239	621	1,115	*232*
Mackerel	—	—	—	188	188	—
Sprats	—	—	2,100	—	2,100	*60*
Whiting	15	1,074	55	656	1,800	*745*
All other, except shell fish	1,182	2,074	525	470	4,251	*3,927*
Total	1,808	8,959	3,890	4,852	19,509	*10,644*
Shell fish:—	No.	No.	No.	No.	No.	*No.*
Crabs	1,600	—	—	—	1,600	*80*
Lobsters	1,760	290	—	1,240	3,290	*1,415*
Oysters	—	156,000	—	20,000	176,000	*29,800*
	Cwts.	Cwts.	Cwts.	Cwts.	Cwts.	*Cwts.*
Other shell fish	—	2	320	482	804	*751*
	Value.					
	£	£	£	£	£	£
Soles	—	387	151	215	753	*827*
Turbot	—	162	70	70	302	*296*
Total prime fish	—	549	221	285	1,055	*1,123*
Cod	109	1,430	283	673	2,495	*1,672*
Haddock	92	1,202	205	207	1,706	*1,086*
Hake	—	270	15	—	285	*251*
Herrings	23	13	55	112	203	*168*
Ling	38	101	136	200	475	*137*
Mackerel	—	—	—	94	94	—
Sprats	—	—	139	—	139	*8*
Whiting	6	529	27	292	854	*443*
All other, except shell fish	394	1,162	254	191	2,001	*2,265*
Total	662	5,256	1,335	2,054	9,307	*7,143*
Shell fish:—						
Crabs	10	—	—	—	10	*1*
Lobsters	70	17	—	38	125	*58*
Oysters	—	176	—	33	209	*55*
Other shell fish	—	1	43	70	114	*81*
Total	80	194	43	141	458	*195*
Total value of fish landed	742	5,450	1,378	2,195	9,765	*7,338*

Note.—The above figures are subject to correction in the Annual Returns. The values given are the actual values returned by the local officers at each place.

IX.—Cotton Returns.—January 1891.

Return of the Number of Bales of Cotton Imported and Exported, Forwarded from Ports to Inland Towns, and Returned to Ports during the Month ended 31st January 1891, compared with the corresponding Month of the Year 1890.

	Month of January	
	1891.	*1890.*
	Imports.	
	No.	*No.*
American	404,043	*397,972*
Brazilian	28,437	*16,269*
East Indian	7,948	*18,931*
Egyptian	47,525	*31,812*
Miscellaneous	10,249	*5,798*
Total	498,202	*470,782*
	Exports.	
American	18,267	*19,391*
Brazilian	—	*1,300*
East Indian	14,135	*20,702*
Egyptian	2,004	*961*
Miscellaneous	2,316	*1,205*
Total	36,722	*43,559*
	Forwarded from Ports to Inland Towns.	
American	314,860	*307,575*
Brazilian	22,333	*11,324*
East Indian	11,962	*17,422*
Egyptian	32,454	*33,294*
Miscellaneous	14,634	*14,133*
Total	396,243	*383,748*
	Forwarded from Inland Towns to Ports.	
American	395	*184*
Brazilian	3	—
East Indian	6	*20*
Egyptian	—	*11*
Miscellaneous	132	—
Total	536	*215*

X.—Periodical Returns of Imports and Exports for Foreign Countries.

Statement of the Imports and Exports into and from the undermentioned Countries in the latest Month for which Returns have been received, with Aggregates for the Period of the Year, including such latest Month.

Note. — Rouble = 2*s.*; Franc = $9\frac{6}{10}$*d.*; Milreis = 4*s.* 6*d.*; Lire = $9\frac{6}{10}$*d.*; Drachme = $9\frac{6}{10}$*d.*; L. Egyptian = 1*l.* 0*s.* 10*d.*; Dollar = 4*s.* 2*d.*

I.—Imports.

Name of Country.	Latest Month.	Value for the Month.		Aggregate for Period of the Year, including latest Month.	
		1890.	*1889.*	1890.	*1889.*
Russia in Europe	Oct.	Roubles 35,339,000	*34,645,000*	314,128,000	*328,054,000*
	Nov.	„ 37,365,000	*34,969,000*	351,493,000	*360,023,000*
France	Dec.	Frs. 388,567,000	*421,411,000*	4,423,255,000	*4,316,768,000*
Portugal	Sept.	Milreis 3,112,000	*2,968,000*	34,069,000	*34,012,000*
Italy	Nov.	Lire 96,174,000	*138,771,000*	1,188,369,000	*1,237,117,000*
Greece	Sept.	Drchms. 14,053,000	—	78,240,000	—
	Oct.	„ 11,215,000	—	89,455,000	—
Egypt	June	L. Egypt 810,000	*528,000*	3,996,000	*3,230,000*
United States	Dec.	Dollars 60,714,000	*59,898,000*	823,319,000	*770,522,000*
British India*	Nov.	Rupees 6,12,61,298	*6,37,95,965*	45,71,59,126	*44,13,49,203*

II.—Exports.

Russia in Europe	Oct.	Roubles 71,108,000	*69,304,000*	577,874,000	*632,960,000*
	Nov.	„ 64,199,000	*64,651,000*	642,073,000	*697,611,000*
France	Dec.	Frs. 372,121,000	*365,104,000*	3,720,121,000	*3,703,987,000*
Portugal	Sept.	Milreis 2,074,000	*1,956,000*	15,968,000	*17,449,000*
Italy	Nov.	Lire 76,908,000	*78,387,000*	772,822,000	*831,841,000*
Greece	Sept.	Drchms. 17,313,000	—	72,619,000	—
	Oct.	„ 10,680,000	—	83,299,000	—
Egypt	June	L. Egypt 442,000	*274,000*	4,901,000	*5,378,000*
United States	Dec.	Dollars 98,440,000	*96,901,000*	857,624,000	*827,106,300*
British India*	Nov.	Rupees 7,14,05,529	*7,84,77,004*	62,69,35,088	*63,08,46,450*

The above figures are subject to revision in the Annual Returns.

Note.—The figures are those of the "special" imports and exports, except in the case of the United States and British India, where the figures are "general." "Special" means, in the case of imports, imports for home consumption, in the case of exports, exports of domestic produce and manufacture only.

* The aggregate figures are for the financial year commencing 1st April.

XI.—Foreign Trade of India.

Imports and Exports into and from British India.

	Imports from Foreign Countries.		Exports to Foreign Countries.*	
	Eight Months ended 30th November		Eight Months ended 30th November	
	1890.	1889.	1890.	1889.
	R.	R.	R.	R.
I.—Animals—living	18,76,359	17,72,295	6,85,885	5,83,857
II.—Articles of food and drink	5,37,59,098	5,04,47,103	17,53,03,469	16,11,54,776
III.—Metals, and manufactures of—				
A.—Hardware and cutlery (including plated-ware)	75,90,868	68,93,696	59,491	63,631
B.—Metals	3,59,25,051	3,67,07,764	3,11,297	3,34,433
C.—Machinery and mill-work	1,41,10,1 2	1,66,97,418	2,872	727
D.—Railway plant and rolling-stock (other than Government stores)	1,38,13,077	1,11,77,388	—	—
IV.—Chemicals, drugs, medicines and narcotics, and dyeing and tanning materials	91,61,144	79,34,277	7,04,92,797	8,56,18,774
V.—Oils	1,63,31,136	1,70,89,239	96,93,107	89,84,328
VI.—Raw materials and unmanufactured articles	2,64,77,902	2,52,88,661	24,86,32,782	25,56,55,355
VII.—Articles manufactured and partly manufactured—				
A.—Yarns and textile fabrics	23,38,09,860	22,41,54,188	7,04,61,476	6,92,44,279
B.—Apparel	80,19,086	88,01,176	6,28,602	6,87,398
C.—Other articles manufactured	3,53,83,893	3,34,75,202	2,46,88,033	2,35,78,285
Total	45,71,59,126	44,13,49,208	60,09,59,871	60,39,00,845

* Exports of Indian Produce and Manufacture only.

LIST OF DIPLOMATIC AND CONSULAR REPORTS.

Annual Series.

Reports of the Annual Series, 1891, have been issued from Her Majesty's Diplomatic and Consular Officers at the following places, and may be obtained from Messrs. Eyre and Spottiswoode, East Harding Street, Fleet Street, E.C., &c.

No.	Place.	Price.
811	Quito	½d.
812	Para	½d.
813	Palermo	2½d.
814	Copenhagen	1d.
815	Seragevo	½d.
816	Porto Rico	1d.

The following Reports from Her Majesty's Representatives abroad on subjects of general and commercial interest have also been issued, and may be obtained from the above-mentioned sources:—

No.	——	Price.
189	*Egypt.*—Report on the Rice Trade in Egypt	½d.
190	*Sweden.*—Report on the State Railways of Sweden	½d.

(*Note.*—On p. 128 of the *Board of Trade Journal* for last month the price of the Foreign Office Paper, No. 187, "Denmark.—Report on the System of State Insurance in Denmark," was given as ½d. It should have been 1½d.)

LIST OF COLONIAL OFFICE REPORTS.

The following reports relative to Her Majesty's Colonial Possesions have been issued by the Colonial Office this year and may be purchased from Messrs. Eyre a nd Spottiswoode, East Harding Street, Fleet Street, E.C., &c. :—

No.	Colony.	Year.
112	Jamaica - - - -	1888–89
113	Falkland Islands - - -	1889
114	Basutoland - - - -	1889–90
115	Sierra Leone - - -	1889
116	Fiji - - - - -	1889
117	Hong Kong - - -	1889
118	St. Helena - - - -	1889